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 $$\operatorname{\textsc{minutes}}$$ NEWS 3 AUG 18 COMPENDEX indexing changed for the Corporate Source

(CS) field
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NEWS 5 AUG 24 CA/Caplus enhanced with legal status information for U.S. patents

NEWS 6 SEP 09 50 Millionth Unique Chemical Substance Recorded in CAS REGISTRY
NEWS 7 SEP 11 WPIDS, WPINDEX, and WPIX now include Japanese FTERM

thesaurus

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=> s US20070129368/pn 1 US20070129368/PN

=> d 11

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN 2005:516308 BIBLIOGRAPHIC DATA NOT AVAILABLE

=> file req

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=> tra 11 1- rn REQUESTED FIELD CODE NOT PRESENT IN ANSWER(S) SPECIFIED.

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=> d ll abs ibibi hitstr 1-

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SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers; SCAN must be entered on the same line as the DISPLAY,

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e.g., D SCAN or DISPLAY SCAN)
STD ----- BIB, CLASS
IABS ----- ABS, indented with text labels
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IBIB ----- BIB, indented with text labels
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HITRN ----- HIT RN and its text modification
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             its structure diagram
HITSEO ----- HIT RN, its text modification, its CA index name, its
             structure diagram, plus NTE and SEO fields
FHITSTR ---- First HIT RN, its text modification, its CA index name, and
             its structure diagram
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FILE 'CAPLUS' ENTERED AT 18:06:45 ON 20 OCT 2009 L1 1 S US20070129368/PN

FILE 'REGISTRY' ENTERED AT 18:08:02 ON 20 OCT 2009

FILE 'CAPLUS' ENTERED AT 18:08:06 ON 20 OCT 2009

FILE 'REGISTRY' ENTERED AT 18:08:06 ON 20 OCT 2009

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=> d 11 ful1

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PATS ----- PI, SO
SAM ----- CC, SX, TI, ST, IT
SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;
             SCAN must be entered on the same line as the DISPLAY,
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STD ---- BIB, CLASS
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=> d 11
    ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN
    2005:516308
                BIBLIOGRAPHIC DATA NOT AVAILABLE
=> s WO2005058803/pn
            1 WO2005058803/PN
                (WO2005058803/PN)
=> d 12
     ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN
     2005:516308 BIBLIOGRAPHIC DATA NOT AVAILABLE
Uploading C:\Program Files\STNEXP\Queries\10581947\10581947-substructure-1.str
chain nodes :
11 12 13 14 15 16 23 24 25
ring nodes :
1 2 3 4 5 6 7 8 9 10 17 18 19 20 21 22
chain bonds :
5-13 7-11 7-12 10-24 10-25 13-14 14-15 14-16 16-17 20-23
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1-2 1-6 2-3 2-7 3-4 3-10 4-5 5-6 7-8 8-9 9-10 17-18 17-22 18-19 19-20

 $1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 17-18 \quad 17-22 \quad 18-19 \quad 19-20 \quad 20-21 \quad 21-22$

ring bonds :

20-21 21-22 exact/norm bonds :

exact bonds :

normalized bonds :

2-7 3-10 7-8 8-9 9-10 14-15 14-16 16-17

5-13 7-11 7-12 10-24 10-25 13-14 20-23

AN

L2

AN

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:CLASS 24:CLASS 25:CLASS

L3 STRUCTURE UPLOADED

=> d L3 HAS NO ANSWERS L3 STR

Structure attributes must be viewed using STN Express query preparation.

=> s 13

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SAMPLE SEARCH INITIATED 18:15:04 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 29 TO ITERAT

100.0% PROCESSED 29 ITERATIONS SEARCH TIME: 00.00.01 7 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
PROJECTED ITERATIONS: 257 TO 903
PROJECTED ANSWERS: 7 TO 298

L4 7 SEA SSS SAM L3

L5 5 L4

=> s 13 full

REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 18:15:10 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED -458 TO ITERATE

100.0% PROCESSED 458 ITERATIONS

SEARCH TIME: 00.00.01

126 SEA SSS FUL L3

41 L6

=> d scan

41 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN

ICM A61K031-195 ICS C07C229-00

1-12 (Pharmacology)

CC

Section cross-reference(s): 25

Active enantiomer of RARy-specific agonist ST

naphthylacetamidobenzoate RAR gamma agonist skin disease; acetamidobenzoate retinoic receptor agonist skin disease

Retinoic acid receptors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(RAR-y; naphthylacetamidobenzoate derivative as RARy-specific agonist for treatment of dermatol. disorders)

Keratosis

(actinic; naphthylacetamidobenzoate derivative as RARy-specific agonist for treatment of dermatol, disorders)

Skin, neoplasm

Skin, neoplasm

(inhibitors; naphthylacetamidobenzoate derivative as RARγ-specific agonist for treatment of dermatol. disorders)

Acne

Psoriasis

(naphthylacetamidobenzoate derivative as RARy-specific agonist for treatment of dermatol, disorders)

ΙT Antitumor agents

Antitumor agents

(skin; naphthylacetamidobenzoate derivative as RARy-specific agonist for treatment of dermatol. disorders)

Antitumor agents

(squamous cell carcinoma; naphthylacetamidobenzoate derivative as RARy-specific agonist for treatment of dermatol, disorders)

262433-64-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(naphthylacetamidobenzoate derivative as RARy-specific agonist for treatment of dermatol, disorders)

262433-54-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(naphthylacetamidobenzoate derivative as RARy-specific agonist for treatment of dermatol. disorders)

106-95-6, Allyl bromide, reactions 403-21-4, 3-Fluoro-4-nitrobenzoic acid 20445-31-2, (+)-Mosher's acid 142650-43-9 168301-02-8

126 ANSWERS

RL: RCT (Reactant); RACT (Reactant or reagent) (naphthylacetamidobenzoate derivative as RARy-specific agonist for treatment of dermatol. disorders) 262433-55-6P 262433-56-7P 262433-57-8P 262433-58-9P 262433-59-0P 262433-60-3P 262433-61-4P 262433-62-5P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (naphthylacetamidobenzoate derivative as RARy-specific agonist for treatment of dermatol, disorders) HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end => d his (FILE 'HOME' ENTERED AT 18:06:31 ON 20 OCT 2009) FILE 'CAPLUS' ENTERED AT 18:06:45 ON 20 OCT 2009 L1 1 S US20070129368/PN FILE 'REGISTRY' ENTERED AT 18:08:02 ON 20 OCT 2009 FILE 'CAPLUS' ENTERED AT 18:08:06 ON 20 OCT 2009 FILE 'REGISTRY' ENTERED AT 18:08:06 ON 20 OCT 2009 FILE 'CAPLUS' ENTERED AT 18:08:14 ON 20 OCT 2009 1 S WO2005058803/PN L2 L3 STRUCTURE UPLOADED S L3 FILE 'REGISTRY' ENTERED AT 18:15:03 ON 20 OCT 2009 7 S L3 L4 FILE 'CAPLUS' ENTERED AT 18:15:04 ON 20 OCT 2009 L5 5 S L4 S L3 FILE 'REGISTRY' ENTERED AT 18:15:09 ON 20 OCT 2009 1.6 126 S L3 FULL FILE 'CAPLUS' ENTERED AT 18:15:10 ON 20 OCT 2009 41 S L6 FULL => file reg COST IN U.S. DOLLARS SINCE FILE TOTAL. ENTRY SESSION FULL ESTIMATED COST 0.50 203.77

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http://www.cas.org/support/stngen/stndoc/properties.html

=> d scan 16

- L6 126 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN Benzoic acid, 4-[[[[(6-hydroxyhexyl)oxy]imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (E)- (9CI)
- MF C29 H38 N2 O5

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

=> d scan 16

- L6 126 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
- IN Benzoic acid, 4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenvl)acetyl]amino]-3-methoxy-
- MF C24 H29 N 05

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

=> d his

L4

(FILE 'HOME' ENTERED AT 18:06:31 ON 20 OCT 2009)

FILE 'CAPLUS' ENTERED AT 18:06:45 ON 20 OCT 2009 1 S US20070129368/PN

FILE 'REGISTRY' ENTERED AT 18:08:02 ON 20 OCT 2009

FILE 'CAPLUS' ENTERED AT 18:08:06 ON 20 OCT 2009

FILE 'REGISTRY' ENTERED AT 18:08:06 ON 20 OCT 2009

FILE 'CAPLUS' ENTERED AT 18:08:14 ON 20 OCT 2009

1.2 1 S WO2005058803/PN L3 STRUCTURE UPLOADED

S L3

5 S L4

FILE 'REGISTRY' ENTERED AT 18:15:03 ON 20 OCT 2009 7 S L3

FILE 'CAPLUS' ENTERED AT 18:15:04 ON 20 OCT 2009

S L3

FILE 'REGISTRY' ENTERED AT 18:15:09 ON 20 OCT 2009 L6 126 S L3 FULL

FILE 'CAPLUS' ENTERED AT 18:15:10 ON 20 OCT 2009 L7 41 S L6 FULL

FILE 'REGISTRY' ENTERED AT 18:15:39 ON 20 OCT 2009

=> s 17 and py<=2004 '2004' NOT A VALID FIELD CODE

0 PY<=2004 0 L7 AND PY<=2004

=> d 17 abs ibib hitstr 1-

YOU HAVE REQUESTED DATA FROM FILE 'CAPLUS' - CONTINUE? (Y) /N:v

YOU HAVE REQUESTED DATA FROM 41 ANSWERS - CONTINUE? Y/(N):v

ANSWER 1 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

ΔR A series of retinoids designed to interfere with the repositioning of H12 have been synthesized to identify novel RARy antagonists based on the structure of known RARy agonists. The transcriptional activities of the novel ligands were revealed by cell-based reporting assays, using engineered cells containg RAR subtype-selective fusions of the RAR ligand-binding domains with the yeast GAL4 activator DNA-binding domain and the cognate luciferase reporter gene. Whereas none of the ligands exhibited features of a selective RARy antagonist, some of them are endowed with interesting activities. In particular 24a acts as a pan-RAR agonist that induces at high concentration a higher transactivation potential on RARα than TTNPB and synergizes at low concentration with TTNPB-bound RARa but not RARB or RARy. Similarly, 24c synergizes with TTNPB-bound RAR γ and exhibits RAR α, β antagonist activity. Compds. 24b and 25b are strong

RARα, β-selective antagonists without agonist or antagonist

activities for RARy. Compds. 24b and 24c display weak RXR

antagonist activity. In addition several pan-antagonists and partial

agonist/antagonists have been defined. ACCESSION NUMBER: 2009:725893 CAPLUS

DOCUMENT NUMBER: 151:260011

TITLE: Retinoid receptor subtype-selective modulators through

synthetic modifications of RARy agonists

AUTHOR(S): Alvarez, Susana; Alvarez, Rosana; Khanwalkar, Harshal;

Germain, Pierre; Lemaire, Geraldine;

Rodriguez-Barrios, Fatima; Gronemeyer, Hinrich; de

Lera, Angel R. CORPORATE SOURCE:

Departamento de Quimica Organica, Universidade de Vigo, Vigo, 36310, Spain

SOURCE:

Bioorganic & Medicinal Chemistry (2009), 17(13), 4345-4359

CODEN: BMECEP: ISSN: 0968-0896 Elsevier B.V. PUBLISHER:

DOCUMENT TYPE: Journal LANGUAGE: English

185629-22-5 1178898-29-7

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (retinoid receptor subtype-selective antagonists preparation through

modifications of RARy agonists)

185629-22-5 CAPLUS

Benzoic acid, 3-fluoro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

RN 1178898-29-7 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[2-oxo-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenvl)acetvl]amino]- (CA INDEX NAME)

REFERENCE COUNT:

62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

AB The present invention provides methods for generating mucosal tissue homing immunosuppressive T-cells comprising treating naive T-cells with retinoids and/or retinoid agonists. Methods are also provided for treating a mammal having an inflammatory or immunol. disease by administering a therapeutically ED of retinoids and/or retinoid agonists. Addnl. methods are also provided for boosting the immune system of a

mammal by inhibiting the generation of immunosuppressive T-cells by administering a therapeutically ED of a retinoid receptor antagonist to the mammal.

2008:1360582 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 149:525397

TITLE: Methods for controlling inflammatory and immunological diseases using retinoids and/or retinoid agonists

Kim, Chang H.; Lim, Hyung W.; Kang, Seung G.

PATENT ASSIGNEE(S): Purdue Research Foundation, USA

SOURCE: PCT Int. Appl., 51pp.

CODEN: PIXXD2 Patent

DOCUMENT TYPE: LANGUAGE:

English FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	PAT	ENT :	. OI			KIND DATE				APPL	ICAT		DATE					
		2008				Δ1	-	2008	1113		WO 2	UU8-	1562	125		2	0080	501
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			CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,
			FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,
			KG,	KM,	KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
			ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,
			PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	TJ,	TM,
			TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW			
		RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,	HU,
			IE,	IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,	SK,
			TR,	BF,	ΒJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,
			TG,	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,
			AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM							
PRIO	RIORITY APPLN. INFO.:										US 2	007-	9151	62P	1	P 2	0070	501
IT	I 185629-22-5																	
	RI: PAC (Pharmacological activity)									THII	(Th	aran	anti	C 110	۱ ۱ د (د	RTOT.		

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(BMS 961; methods for controlling inflammatory and immunol. diseases using retinoid receptor agonists to generate mucosal tissue homing immunosuppressive T cells)

185629-22-5 CAPLUS

RN

CN Benzoic acid, 3-fluoro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8tetramethyl-2-naphthalenyl)acetyllaminol- (CA INDEX NAME)

2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

A review of the article 1,2,4-Triazole. ACCESSION NUMBER: 2008:994388 CAPLUS DOCUMENT NUMBER: 149:306796 TITLE: 1,2,4-Triazole

AUTHOR(S): Gesquiere, Jean-Claude; Siedem, Christopher S.

CORPORATE SOURCE:

SOURCE: e-EROS Encyclopedia of Reagents for Organic Synthesis

(2001), No pp. given. John Wiley & Sons, Ltd.:

Chichester, UK. CODEN: 69KUHI

URL: http://www3.interscience.wilev.com/cgi-

bin/mrwhome/104554785/HOME

DOCUMENT TYPE: Conference; General Review; (online computer file)

LANGUAGE: English

CASREACT 149:306796 OTHER SOURCE(S): 301674-62-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(1,2,4-Triazole) RN 301674-62-4 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[(2R)-2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8tetramethyl-2-naphthalenyl)acetyl]amino]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 4 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN L7

AB The invention discloses a method for generating a human atopic disease-like phenotype, preferably an atopic dermatitis-like phenotype in a mammal, comprising administering to the mammal at least one compound selected from physiol. active vitamin D3 (1a,25 (OH)2-D3) and agonistic analogs thereof. The invention also discloses a method for treating and/or preventing an atopic disease in a patient comprising administering to the patient an effective amount of at least one vitamin D3 antagonist.

ACCESSION NUMBER: 2008:124360 CAPLUS

DOCUMENT NUMBER: 148:206668

TITLE: Vitamin D3-based methods for generating mammalian models of atopic diseases and screening for their

treatment

INVENTOR(S): Chambon, Pierre; Metzger, Daniel; Li, Mei PATENT ASSIGNEE(S): Association pour la Recherche a l'LGBMC, Fr.

SOURCE: PCT Int. Appl., 35pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT :	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D.	ATE	
						-											
WO	2008	0126	45		A2		2008	0131		WO 2	007-	IB21	02		2	0070	724
WO	2008	0126	45		A3		2008	0605									
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,

GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA EP 1891944 A1 20080227 EP 2006-291201 20060724 AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU EP 2046309 A2 20090415 EP 2007-804636 20070724 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS PRIORITY APPLN. INFO.: EP 2006-291201 20060724 US 2006-832864P Р 20060724 WO 2007-IB2102 W 20070724 185629-22-5

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(BMS 961; vitamin D3-based methods for generating mammalian models of atopic diseases, drug screening methods and treatment methods) 185629-22-5 CAPLUS RN

Benzoic acid, 3-fluoro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-CN tetramethvl-2-naphthalenvl)acetvl]aminol- (CA INDEX NAME)

262433-54-5

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(vitamin D3-based methods for generating mammalian models of atopic diseases, drug screening methods and treatment methods)

262433-54-5 CAPLUS RN

Benzoic acid, 3-fluoro-4-[[(2R)-2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8tetramethyl-2-naphthalenyl)acetyllaminol- (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 5 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

AB A method and an apparatus are provided for forming the shape of a ligand mol. capable of binding with a biopolymer by a modeling/simulation based on the three-dimensional structure information of the biopolymer. The method comprises disposing virtual atoms in a ligand binding region of the biopolymer; calculating the van der Waals potential between the biopolymer and the virtual atoms; and removing a van der Waals potential portion in which any unstable virtual atom is involved from the calculated van der Waals potential. The method was applied to dihydrofolic acid reductase, retinoic acid receptor y and bacteriorhodopsin, and the ligand shape obtained by this method was found to be well in accordance with the resp. known ligand, methotrexate, BMS961 and retinal.

ACCESSION NUMBER: 2005:1171087 CAPLUS

DOCUMENT NUMBER: 143:418629

TITLE: Method and apparatus for forming shape of ligand

molecule for biopolymer

INVENTOR(S): Handa, Chiaki; Ozawa, Tomonaga; Ozawa, Motoyasu;

Maruyama, Hidetoshi; Momose, Denichi
PATENT ASSIGNEE(S): Kissei Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 38 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

TENT	INFORMATION:	

PAT	PATENT NO.					KIND DATE				APPL	ICAT		DATE				
WO	2005				A1		2005	1103		WO 2	005-	JP75	95		2	0050	421
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KP,	KR,	KZ,
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,
		NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,
		SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,
		ZM,	zw														
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		AZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	ΙT,	LT,	LU,	MC,	NL,	PL,	PT,
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,
		MR,	ΝE,	SN,	TD,	TG											

PRIORITY APPLN. INFO.: JP 2004-128864 A 20040423

IT 185629-22-5, BMS 961

RL: BSU (Biological study, unclassified); BIOL (Biological study) (modeling and simulation method and apparatus for forming shape of ligand mol. for biopolymer)

RN 185629-22-5 CAPLUS

EN Benzoic acid, 3-fluoro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

8 ANSWER 6 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

2005:516308 BIBLIOGRAPHIC DATA NOT AVAILABLE AN

2005:516308 BIBLIOGRAPHIC DATA NOT AVAILABLE ΔM

BIBLIOGRAPHIC DATA NOT AVAILABLE

ANSWER 7 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN L7

AN 2005:427081 BIBLIOGRAPHIC DATA NOT AVAILABLE AN 2005:427081 BIBLIOGRAPHIC DATA NOT AVAILABLE

BIBLIOGRAPHIC DATA NOT AVAILABLE

ANSWER 8 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

AB The invention discloses compns. comprising a retinoid X receptor agonist and an agent capable of activating protein kinase A. The invention also discloses methods for treating hyperproliferative diseases (e.g. leukemia, breast cancer) by administering a retinoid X receptor agonist and an agent capable of activating protein kinase A. Prepn of

4-[1-(5,6-dihydro-3,5,5-trimethyl-8-isopropyl-2-naphthalenyl)ethenyl]

benzoic acid is described.

ACCESSION NUMBER: 2003:749997 CAPLUS DOCUMENT NUMBER: 139:255334

TITLE: Compositions and methods using an RXR agonist and a

protein kinase A activator for the treatment of

hyperproliferative diseases INVENTOR(S):

Benoit, Gerard; Gronemeyer, Hinrich; Lanotte, Michel; Gottardis, Marco

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA; Institut National

de la Sante et de la Recherche Medicale; Centre National de la Recherche Scientifique; Universite

Louis Pasteur U.S., 35 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

SOURCE:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6624154	B1	20030923	US 2000-556675	20000421
RIORITY APPLN. INFO.:			US 1999-130649P P	19990423
THER SOURCE(S):	MARPAT	139:255334		

OTHER SOURCE(S): IT 185629-22-5

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(RXR agonist and protein kinase A activator for treatment of

hyperproliferative diseases, and use with other agents)

185629-22-5 CAPLUS RN

Benzoic acid, 3-fluoro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

THERE ARE 108 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 9 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

108

Maturation of dendritic cells (DCs) is a critical step for the induction of AB an immune response. We have examined the role of retinoid nuclear receptor pathways in this process. Retinoids induce DC apoptosis, in the absence of inflammatory signals, through retinoic acid receptor (RAR)α/retinoic X receptor (RXR) heterodimers. In contrast, via a cross talk with inflammatory cytokines, retinoids increase DNA binding activity of nuclear factor KB in DCs, trigger membrane major histocompatibility complex class II and costimulatory mol. expression, induce the differentiation of immature DCs into mature DCs, and enhance antigen-specific T cell response. This maturation of DCs is mediated via a RXR-dependent/RAR-independent pathway and via an RARa/RXR pathway distinct from the one responsible for apoptosis. Apoptosis and activation, mediated through distinct nuclear retinoid receptor pathways, can be dissociated from each other with selective synthetic retinoids. We identify a novel cellular function for retinoids and suggest that selective retinoids might be of interest for controlling antigen presentation.

ACCESSION NUMBER: 2003:661125 CAPLUS

DOCUMENT NUMBER: 139:306456

TITLE: Retinoids regulate survival and antigen presentation

by immature dendritic cells

Geissmann, Frederic; Revy, Patrick; Brousse, Nicole; AUTHOR(S): Lepelletier, Yves; Folli, Claudia; Durandy, Anne;

Chambon, Pierre; Dy, Michel CORPORATE SOURCE:

UPRES EA 219, Service d'Anatomie Pathologique, Institut Federatif de Recherche Necker-Enfants

Malades, Hopital Necker-Enfants Malades, Paris, 75743/15, Fr.

Journal of Experimental Medicine (2003), 198(4),

623-634

CODEN: JEMEAV; ISSN: 0022-1007 Rockefeller University Press

PUBLISHER: DOCUMENT TYPE: Journal

LANGUAGE: English

185629-22-5, BMS961 RL: BSU (Biological study, unclassified); BIOL (Biological study) (retinoids regulate survival and antigen presentation by immature

dendritic cells) RN 185629-22-5 CAPLUS

SOURCE:

CN Benzoic acid, 3-fluoro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8tetramethy1-2-naphthaleny1)acety1]amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 33 THERE ARE 33 CAPLUS RECORDS THAT CITE THIS RECORD (33 CITINGS)

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L7 ANSWER 10 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

Virtual library screening (VLS) is emerging as a valuable drug lead AB discovery tool. ICM-VLS implementation of this technol. was evaluated on a benchmark set of nuclear hormone receptors (NRs), an important therapeutic target family. Over 5000 structurally diverse compds., including 78 known NR ligands, were screened against 18 crystal structures and one computer model of 10 NR ligand binding domains in their active or inactive states. The results confirm the ability of the VLS method to generate highly focused subsets of the input chemical library, enriched 33to 100-fold for all but one receptor studied. However, receptor flexibility remains to be fully addressed, and the choice of the specific conformation used for screening may determine the success of the exercise. authors observe that for a particular ligand, VLS can often identify the correct target within the receptor family, although the technol. is unable to reliably discriminate between the closely related receptor isoforms. Addnl., the results suggest that VLS may be applied successfully without an exptl. structure of the receptor by using a homol. model. These data represent a realistic snapshot of the state-of-the-art of NR-targeted VLS and define the recent progress and the remaining limitations of the technol.

ACCESSION NUMBER: 2003:421336 CAPLUS

DOCUMENT NUMBER: 139:127969

TITLE: Nuclear Hormone Receptor Targeted Virtual Screening AUTHOR(S): Schapira, Matthieu; Abagyan, Ruben; Totrov, Maxim

CORPORATE SOURCE: Molsoft LLC, La Jolla, CA, 92037, USA SOURCE: Journal of Medicinal Chemistry (2003), 46(14),

3045-3059

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

IT 185629-22-5, BMS961 262433-54-5, BMS270394

RL: PAC (Pharmacological activity); PRP (Properties); BIOL (Biological study)

(nuclear hormone receptor targeted virtual screening)

RN 185629-22-5 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

RN 262433-54-5 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[(2R)-2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 63 THERE ARE 63 CAPLUS RECORDS THAT CITE THIS

RECORD (65 CITINGS)

REFERENCE COUNT: 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 11 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN
AB Fusion and hypoplasia of the first two branchial as

Fusion and hypoplasia of the first two branchial arches, a defect typically observed in retinoic acid (RA) embryopathy, is generated in cultured mouse embryos upon treatment with BMS453, a synthetic compound that exhibits retinoic acid receptor B (RARB) agonistic properties in transfected cells. By contrast, no branchial arch defects are observed following treatment with synthetic retinoids that exhibit RARa or RARy agonistic properties. The BMS453-induced branchial arch defects are mediated through RAR activation, as they are similar to those generated by a selective pan-RAR agonist, are prevented by a selective pan-RAR antagonist and cannot be mimicked by exposure to a pan-RXR agonist alone. They are enhanced in the presence of a pan-RXR agonist, and cannot be generated in Rarb-null embryos. Furthermore, they are accompanied, in the morphol. altered region, by ectopic expression of Rarb and of several other direct RA target genes. Therefore, craniofacial abnormalities characteristic of the RA embryopathy are mediated through ectopic activation of RARB/RXR heterodimers, in which the ligand-dependent activity of RXR is subordinated to that of RARB. Endodermal cells lining the first two branchial arches respond to treatment with the RARβ agonist, in contrast to neural crest cells and ectoderm, which suggests that a faulty endodermal regionalization is directly responsible for RA-induced branchial arch dysmorphologies. Addnl., we provide the first in vivo evidence that the synthetic RARB agonist BMS453

exhibits an antagonistic activity on the two other RAR isotypes.

ACCESSION NUMBER: 2003:420577 CAPLUS

DOCUMENT NUMBER: 139:225738

TITLE: Retinoic acid-induced developmental defects are

mediated by RARβ/RXR heterodimers in the

pharvngeal endoderm

Matt, Nicolas; Ghyselinck, Norbert B.; Wendling,

Olivia; Chambon, Pierre; Mark, Manuel

Institut de Genetique et de Biologie Moleculaire et

Cellulaire, CNRS/INSERM/ULP, College de France, BP

10142, Illkirch, 67404, Fr.

SOURCE: Development (Cambridge, United Kingdom) (2003),

130(10), 2083-2093

CODEN: DEVPED; ISSN: 0950-1991
PUBLISHER: Company of Biologists Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

T 185629-22-5, BMS961

AUTHOR(S):

CORPORATE SOURCE:

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (retinoic acid-induced developmental defects are mediated by

RARβ/RXR heterodimers in pharyngeal endoderm)

RN 185629-22-5 CAPLUS

Benzoic acid, 3-fluoro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-CN tetramethy1-2-naphthaleny1)acety1[amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 42 THERE ARE 42 CAPLUS RECORDS THAT CITE THIS RECORD (42 CITINGS)

93 THERE ARE 93 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 12 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

Carbon-14 labeled (R)-3-fluoro-4-(2'-(5'', 6'', 7'', 8''-tetrahydro-5'', AB 5'', 8'', 8''-tetramethyl-2''-naphthyl)-[2'-hydroxy-14C])[carbonyl-14C]acetamidobenzoic acid (I), was prepared in a six step radioactive synthesis from di-Et [carboxylate-14C1,2] oxalate. The penultimate compound was purified by chiral HPLC, which following deprotection yielded I in an overall radiochem. yield of 6.8%. The specific activity of the final product was found to be 24.5 µCi/mg with a radiochem. purity of >99% as determined by HPLC. Derivatization of I via trimethylsilyl diazomethane to the corresponding Me ester, followed by chiral HPLC anal., demonstrated that I

had an optical purity of >99% ee. ACCESSION NUMBER: 2003:190698 CAPLUS

DOCUMENT NUMBER: 139:100910

TITLE: Synthesis of carbon-14 labeled

(R)-3-fluoro-4-(2'-(5'', 6'', 7'', 8''-tetrahydro-5'', 5'', 8'', 8''-tetramethv1-2''-naphthv1)-[2'-hvdroxv-

14C])[carbonyl-14C]acetamidobenzoic acid

AUTHOR(S): Dischino, Douglas D.; Lee, Che-Wah; Belema, Makonen;

Zusi, Christopher CORPORATE SOURCE: Department of Chemical Synthesis, Bristol-Myers

Squibb, Wallingford, CT, 06492, USA

SOURCE: Journal of Labelled Compounds & Radiopharmaceuticals

(2003), 46(2), 159-165

CODEN: JLCRD4: ISSN: 0362-4803

John Wiley & Sons Ltd.

PUBLISHER:

DOCUMENT TYPE: Journal LANGUAGE:

English OTHER SOURCE(S): CASREACT 139:100910

ΙT 558452-46-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent) (Me ester derivatization of; preparation of highly pure carbon-14 labeled

fluoro(tetrahydrotetramethylnaphthyl)(hydroxycarbonyl)acetamidobenzoic acid via six-step radiochem. synthetic route)

RN 558452-46-3 CAPLUS

Benzoic acid, 3-fluoro-4-[[(2R)-hydroxy(5,6,7,8-tetrahydro-5,5,8,8tetramethyl-2-naphthalenyl)acetyl-14C2]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 558452-51-0P

RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (deprotection of; preparation of highly pure carbon-14 labeled fluoro(tetrahydrotetramethylnaphthyl) (hydroxycarbonyl) acetamidobenzoic acid via six-step radiochem. synthetic route)

RN 558452-51-0 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[(2R)-hydroxy(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl-14C2]amino]-, 2-propenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 558452-52-1P

RI: SYP (Byproduct); PREP (Preparation) (preparation of highly pure carbon-14 labeled fluoro(tetrahydrotetramethylnaphthyl)(hydroxycarbonyl)acetamidobenzoic acid via six-step radiochem. synthetic route)

RN 558452-52-1 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[(2S)-hydroxy(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl-14C2]amino]-, 2-propenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 558452-53-2P

CN

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of highly pure carbon-14 labeled
fluoro(tetrahydrotetramethylnaphthyl)(hydroxycarbonyl)acetamidobenzoic
acid via six-step radiochem. synthetic route)

RN 558452-53-2 CAPLUS

Benzoic acid, 3-fluoro-4-[[(2R)-hydroxy(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl-14C2]amino]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 558452-50-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(reduction of; preparation of highly pure carbon-14 labeled fluoro(tetrahydrotetramethylnaphthyl)(hydroxycarbonyl)acetamidobenzoic acid via six-step radiochem, synthetic route)

RN 558452-50-9 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[oxo(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl-14C2]amino]-, 2-propenyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 13 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

AB The invention provides chemotherapeutic combinations of selected cytotoxic agents and $RAR\alpha/\beta$ selective agonists or RAR pan antagonists for

use in treating cancer and lowering the effective cytotoxic dose of the selected cytotoxic agent.

ACCESSION NUMBER: 2002:777643 CAPLUS

DOCUMENT NUMBER: 137:273185

TITLE: Synergistic combinations of retinoid receptor ligands and selected cytotoxic agents for treatment of cancer

INVENTOR(S): Vivat-Hannah, Valerie Sandrine; Lorenzi, Matthew V.; Gottardis, Marco M.; Zusi, Fred Christopher

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: PCT Int. Appl., 34 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.							DATE		i	APPI	LICAT	ION I	NO.		D.	ATE		
	2002	0786	20		A2				1	WO 2	2002-	US87	18		2	0020	322	
	W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	, BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	, EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	, KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	
											, MW,							
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	, SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	
								ZA,										
	RW:										, TZ,							
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											, BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	
			GQ,	GW,				SN,										
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											2002-							
EP	1383										2002-							
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ONT	1498				A.						, TR 2002-:	0070	0.1		2	0000	222	
	2004										2002-					0020		
	2002										2004-					0020		
	2002				A2			0830			2002- 2004-:					0020		
	2004				T			0916			2004 2002					0020		
	2003										2003-1					0030		
	2003							0129			2003-					0030		
	2004							0624			2004-					0040		
	APP:							0024			2001-							
											2002-					0020		

IT 262433-54-5

RL: PAC (Pharmacological activity); BIOL (Biological study)

(retinoid receptor ligand-cytotoxic agent synergistic combinations for treatment of cancer)

RN 262433-54-5 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[(2R)-2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L7 ANSWER 14 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

AB To investigate the roles of retinoic acid (RA) receptors (RARs) in the physiol. of epidermis that does not express RARB, conditional spatio-temporally controlled somatic mutagenesis was used to selectively ablate RARa in keratinocytes of RARy-null mice. Keratinocyte proliferation was maintained in adult mouse epidermis lacking both RARα and RARy, as well as in RARB-null mice. All RAR-mediated signaling pathways are therefore dispensable in epidermis for homeostatic keratinocyte renewal. However, topical treatment of mouse skin with selective retinoids indicated that RXR/RARy heterodimers, in which RXR transcriptional activity was subordinated to that of its RARy partner, were required for retinoid-induced epidermal hyperplasia, whereas RXR homodimers and RXR/RARa heterodimers were not involved. RA-induced keratinocyte proliferation was studied in mutant mice in which RXRa, RXRa and RARa, RARy, or RXRα and RARy genes were specifically disrupted in either basal or suprabasal keratinocytes. The authors demonstrate that the topical retinoid signal is transduced by RXRa/RARy heterodimers in suprabasal keratinocytes, which, in turn, stimulate proliferation of basal keratinocytes via a paracrine signal that may be

heparin-binding EGF-like growth factor. ACCESSION NUMBER: 2002:554369 CAPLUS

DOCUMENT NUMBER: 137:273479

TITLE: Physiological and retinoid-induced proliferations of

epidermis basal keratinocytes are differently

controlled

AUTHOR(S): Chapellier, Benoit; Mark, Manuel; Messaddeq, Nadia; Calleja, Cecile; Warot, Xavier; Brocard, Jacques;

Gerard, Christelle; Li, Mei; Metzger, Daniel;

Ghyselinck, Norbert B.; Chambon, Pierre Institut de Genetique et de Biologie Moleculaire et

Cellulaire, CNRS/INSERM/ULP, College de France, CU de

Strasbourg, 67404, Fr.

SOURCE: EMBO Journal (2002), 21(13), 3402-3413

CODEN: EMJODG; ISSN: 0261-4189

PUBLISHER: Oxford University Press

DOCUMENT TYPE: Journal LANGUAGE: English

IT 185629-22-5, BMS 961

CORPORATE SOURCE:

RE: BSU (Biological study, unclassified); BIOL (Biological study) (physiol. and retinoid-induced proliferations of epidermis basal keratinocytes are differently controlled)

RN 185629-22-5 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 49 THERE ARE 49 CAPLUS RECORDS THAT CITE THIS

RECORD (50 CITINGS)

REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 15 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN GI

Me Me OH H F Me Me O
$$CO_2H$$
 Me Me Me II

AB A novel synthesis of BMS-270394 (I, R = H), a nuclear retinoic acid receptor (RaRy) agonist, is reported. The synthesis includes an enantioselective reduction of α -ketoacid II to the corresponding chiral α -hydroxy acid III using a NaBH4/L-tartaric acid mixture and a novel coupling between III and an electron-deficient aniline IV, which was activated via its N-sulfinyl derivative to form chiral I (R = Me). The synthesis was completed by a racemization-free hydrolysis of I (R = Me) to I (R = H) using KOSiMe3 in acetonitrile.

ACCESSION NUMBER: 2002:548593 CAPLUS

DOCUMENT NUMBER: 137:247474

TITLE: A Practical Synthesis of the RARy Agonist, BMS-270394

AUTHOR(S): Chidambaram, Ramakrishnan; Kant, Joydeep; Zhu, Jason; Lajeunesse, Jean; Sirard, Pierre; Ermann, Peter;

CORPORATE SOURCE: Department of Process Research and Development,

Bristol-Myers Squibb, New Brunswick, NJ, 08903, USA SOURCE: Organic Process Research & Development (2002), 6(5),

SOURCE: Organic Process Research & Development (200 632-636

CODEN: OPRDFK; ISSN: 1083-6160

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:247474

- 301674-62-4P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 - (Reactant or reagent) (practical synthesis of the RARy agonist, BMS-270394)
- RN 301674-62-4 CAPLUS
- Benzoic acid, 3-fluoro-4-[[(2R)-2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8tetramethvl-2-naphthalenvl)acetvl]aminol-, methvl ester (CA INDEX NAME)

Absolute stereochemistry.

ΤТ 262433-54-5P, BMS-270394

RL: SPN (Synthetic preparation); PREP (Preparation) (practical synthesis of the RARy agonist, BMS-270394)

- RN 262433-54-5 CAPLUS
- CN Benzoic acid, 3-fluoro-4-[[(2R)-2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.

THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD OS.CITING REF COUNT: 2 (2 CITINGS)

20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 16 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN GI

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- AR The chiral tetrahydronaphthalenyl ester I (R1 = Et) and the corresponding acid I (R1 = H) were prepared as intermediates in the synthesis of the

retinoic acid receptor gamma-specific agonist II. Enantioselective reduction of (tetrahydronaphthalenyl)oxoacetate III (R2 = Et) to I (R1 = Et) was carried out using Aureobasidium pullulans SC 13849 in 98% yield and with an enantiomeric excess (e.e.) of 96%. Among microorganisms screened for the reduction of (tetrahydronaphthalenyl)acetic acid III (R2 = H) to hydroxy acid I (R1 = H), Candida maltosa SC 16112 and two strains of Candida utilis (SC 13983, SC 13984) gave reaction yields of >53% with e.e.s of >96%.

ACCESSION NUMBER: 2002:287783 CAPLUS

DOCUMENT NUMBER: 137:278894

TITLE: Enantioselective microbial reduction of

2-oxo-2-(1',2',3',4'-tetrahydro-1',1',4',4'-

tetramethyl-6'-naphthalenyl)acetic acid and its ethyl

ester

Patel, Ramesh N.; Chu, Linda; Chidambaram,

Ramakrishna; Zhu, Jason; Kant, Joydeep

CORPORATE SOURCE: Process Research & Development, Bristol-Myers Squibb Pharmaceutical Research Institute, New Brunswick, NJ,

08903, USA

SOURCE: Tetrahedron: Asymmetry (2002), 13(4), 349-355

CODEN: TASYE3; ISSN: 0957-4166
PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:278894 IT 262433-54-5P

RL: PNU (Preparation, unclassified); PREP (Preparation)

(enantioselective microbial reduction in preparation of chiral

intermediates in

RN

AUTHOR(S):

formal synthesis of [[fluoro(hydroxy)tetrahydronaphthalenyl]acetyl]amin obenzoic acid)

262433-54-5 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[(2R)-2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyllamino]- (CA INDEX NAME)

Absolute stereochemistry.

IT 301674-62-4P

RL: BPN (Biosynthetic preparation); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)

(enantioselective preparation of

[(tetrahydronaphthalenyl)hydroxyacetylamino]benzoate via microbial reduction of [(tetrahydronaphthalenyl)oxoacetylamino]benzoate)

RN 301674-62-4 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[(2R)-2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

тт 185629-33-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(enantioselective preparation of

[(tetrahydronaphthalenyl)hydroxyacetylamino]benzoate via microbial

reduction of [(tetrahydronaphthalenyl)oxoacetylamino|benzoate)

RN 185629-33-8 CAPLUS

Benzoic acid, 3-fluoro-4-[[2-oxo-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-CN 2-naphthalenvl)acetvl]aminol-, methyl ester (CA INDEX NAME)

ΙT 185629-34-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of [(tetrahydronaphthalenyl)hydroxyacetylamino|benzoate via reduction of [(tetrahydronaphthalenyl)oxoacetylamino|benzoate)

RN 185629-34-9 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8tetramethyl-2-naphthalenyl)acetyl]amino]-, methyl ester (CA INDEX NAME)

OS.CITING REF COUNT: 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 17 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

Apo and holo forms of retinoic acid receptors, and other nuclear AB receptors, display differential sensitivity to proteolytic digestion that likely reflects the distinct conformational states of the free and liganded forms of the receptor. The authors have developed a method for rapid peptide mapping of holo-retinoic acid receptor γ that utilizes matrix-assisted laser-desorption-ionization time-of-flight MS to identify peptide fragments that are derived from the partially proteolyzed holo-receptor. The peptide maps of retinoic acid receptor y bound by four different agonists were identical, suggesting that all four ligands induced a similar conformational change within the ligand-binding domain of the receptor. In all cases, this agonist-induced conformational change promoted the direct association of retinoic acid receptor y with the transcriptional co-activator p300 and inhibited interaction of the receptor with the nuclear receptor co-repressor. SR11253, a compound previously reported to exert mixed retinoic acid receptor y agonist/antagonist activities in cultured cells, was found to bind directly to, but only weakly altered the protease-sensitivity of, the receptor and failed to promote interaction of the receptor with p300 or induce dissociation of receptor-nuclear receptor co-repressor complexes. This technique should be generally applicable to other members of the nuclear receptor superfamily that undergo an induced structural alteration upon

interaction. ACCESSION NUMBER:

2002:183571 CAPLUS

DOCUMENT NUMBER: 136:304192 TITLE:

Mass-spectrometric analysis of agonist-induced retinoic acid receptor y conformational change

AUTHOR(S): Peterson, Valerie J.; Barofsky, Elisabeth; Deinzer, Max L.; Dawson, Marcia I.; Feng, Kai-Chia; Zhang,

agonist or antagonist binding, DNA binding and/or protein-protein

Xiao-Kun; Madduru, Machender R.; Leid, Mark

Laboratory of Molecular Pharmacology, Department of CORPORATE SOURCE: Pharmaceutical Sciences, College of Pharmacy, Oregon

State University, Corvallis, OR, 97331, USA SOURCE:

Biochemical Journal (2002), 362(1), 173-181

CODEN: BIJOAK; ISSN: 0264-6021

PUBLISHER: Portland Press Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

262433-54-5, BMS 270394

RL: BSU (Biological study, unclassified); BIOL (Biological study) (MALDI-TOF mass-spectrometric anal. of aconist-induced retinoate RARy receptor conformational change in relation to proteolysis and signaling)

RN 262433-54-5 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[(2R)-2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

.7 ANSWER 18 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

AB The focus of this study was to develop retinoic acid receptor (RAR) RARα/β selective agonists with anticancer efficacy and reduced toxicity associated with RARy activity. In these studies, we report the identification and characterization of high-affinity RARα/β selective agonists with limited RARy activity. These compds. inhibited human tumor cell line proliferation with similar efficacy to that observed for a pan-RAR agonist. However, for most tumor cell lines, the efficacy of these compds. was restricted to the micromolar range. To determine whether the RARα/β selective agonists could be additive or synergistic with existing agents, we investigated the effects of combining RARα/β selective agonists with various cytotoxic agents. Our results showed that the α/β selective retinoids dramatically lowered the ED of Taxol needed to induce cytotoxicity of a wide range of tumor cell lines. This synergy was specific to tubulin-modifying agents and could not be observed with a variety of other cytotoxic agents of diverse function. Examination of pathways common to Taxol and retinoid signaling revealed that this synergy was related in part to effects on Bc1-2 expression/phosphorylation as well as the activity of the c-Jun NH2-terminal kinase and activator protein-1. In contrast, the tubulin polymerization induced by Taxol was not further affected by cotreatment with a variety of retinoid receptor ligands. These observations indicate that potent RARα/β selective agonists may be of therapeutic benefit

in combination with Taxol therapy.
ACCESSION NUMBER: 2002:12739 CAPLUS

DOCUMENT NUMBER: 136:272795

TITLE: Synergistic cytotoxicity exhibited by combination

treatment of selective retinoid ligands with taxol

(paclitaxel)

AUTHOR(S): Vivat-Hannah, Valerie; You, Dan; Rizzo, Cheryl; Daris,

Jean-Paul; Lapointe, Philippe; Zusi, F. Christopher; Marinier, Anne; Lorenzi, Matthew V.; Gottardis, Marco

м.

CORPORATE SOURCE: Department of Oncology Drug Discovery, Bristol-Myers

Squibb Pharmaceutical Research Institute, Princeton,

NJ, 08543-4000, USA

SOURCE: Cancer Research (2001), 61(24), 8703-8711

CODEN: CNREA8; ISSN: 0008-5472

PUBLISHER: American Association for Cancer Research
DOCUMENT TYPE: Journal

LANGUAGE: English

IT 262433-54-5, BMS-270394

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(synergistic cytotoxicity exhibited by combination treatment of selective retinoid ligands with paclitaxel)

RN 262433-54-5 CAPLUS

N Benzoic acid, 3-fluoro-4-[[(2R)-2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino|- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 23 THERE ARE 23 CAPLUS RECORDS THAT CITE THIS RECORD (23 CITINGS)

REFERENCE COUNT: 67 THERE ARE 67 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 19 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

AB Vitamin A (retinol) deficiency results in impaired response to infection and increased mortality. The inventors show that retinol activates immature dendritic cells (DC) and enhances antigen presentation via a cross-talk with inflammatory cytokines, whereas it increases DC death in the absence of these cytokines. These effects, that are mediated through retinoic acids and distinct nuclear retinoid receptor pathways, can be dissociated from each other with selective synthetic retinoids. The invention identifies a novel cellular target and function for retinoids, provides compns. and methods for modulating the immune system and for treating or preventing various phys. disorders in animals, preferably via controlling activation and/or apoptosis in antigen-presenting cells using selective retinoids.

2001:780660 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 135:327340

TITLE: Retinoid compositions and methods for use in

modulating immune system function

INVENTOR(S): Geissmann, Frederic; Lepelletier, Yves; Dy, Michel; Durandy, Anne; Revy, Patrick; Chambon, Pierre

PATENT ASSIGNEE(S): Fr.

SOURCE: PCT Int. Appl., 115 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.						KIND DATE			APPLICATION NO.						DATE			
WC	2001		A2 20011025			1025		WO 2	001-	IB48	4		20010412						
WC	2001	0787	00		A3		2002	0530											
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,		
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,		
		HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,		
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,		
		RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	UZ,	VN,		
		YU,	ZA,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM						
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,		
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,		
		BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG				
US	2002	0090	352		A1		2002	0711		US 2	001-	8329	22		2	0010	412		
PRIORIT	PRIORITY APPLN. INFO.:									US 2	000-	1969:	21P	1	P 2	0000	413		
TT 18	T 185629-22-5																		

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); BIOL (Biological study)

(retinoid for modulating immune system function)

185629-22-5 CAPLUS RN

Benzoic acid, 3-fluoro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-CN tetramethyl-2-naphthalenyl)acetyllaminol- (CA INDEX NAME)

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD OS.CITING REF COUNT: (1 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

1.7 ANSWER 20 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

AB The invention concerns the use of at least a compound selected among retinoid-type mols. for preparing a composition for preventive or curative treatment of bacterial colonization, deterioration in pathol. conditions caused by said colonization and secondary skin infections induced by said bacteria and more particularly by the Staphylococcus aureus. The invention also concerns the use of at least a compound selected among retinoid-type mols. in a skin cleansing composition, and a cosmetic treatment method for cleaning the skin or correcting its smell by applying said composition on the skin. The MIC of 6-[3-(1-adamanty1)-4-methoxy-5hydroxyphenyl]-2-naphthoic acid (I) against S. aureus was 0.14 µM. A tablet contained I 0.001, starch 0.114, dicalcium phosphate 0.020, silica

0.020, lactose 0.30, talc 0.010, and magnesium stearate 0.005 g. 2001:581692 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER: 135:157685

TITLE:

Pharmaceutical compositions containing retinoid-type

compounds as antibacterial agents INVENTOR(S): Voegel, Johannes; Cavey, Marie-Therese

PATENT ASSIGNEE(S): Galderma Research & Development, Fr.

SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DOCUMENT TYPE:

PAT	PATENT NO.				KIN	D	DATE			APPL	ICAT		DATE				
	O 2001056554 A2 O 2001056554 A3						2001 2001			WO 2	001-	FR28	0		2	0010	130
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,
		HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,
		SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,
		YU,	ZA,	ZW													
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
FR	2804	323			A1		2001	0803		FR 2	000-	1206			2	0000	131
FR	2804	323			В1		2006	0707									

CA	2399087			A1	20010809	CA 2001-2399087		2	20010130
BR	2001008	115		A	20021022	BR 2001-8115		2	20010130
EP	1255543			A2	20021113	EP 2001-903998		2	20010130
	R: AT	, BE,	CH,	DE,	DK, ES, FR,	GB, GR, IT, LI, LU,	NL,	SE,	MC, PT
	IE	, SI,	LT,	LV,	FI, RO, MK,	CY, AL, TR			
JP	2003521	510		T	20030715	JP 2001-556246		2	20010130
NZ	520316			A	20040528	NZ 2001-520316		2	20010130
AU	777629			B2	20041021	AU 2001-31936		2	20010130
ZA	2002005	738		A	2003032	ZA 2002-5738		- 2	20020718
NO	2002003	630		A	20020930	NO 2002-3630		2	20020730
MX	2002007	371		A	20040730	MX 2002-7371		2	20020730
US	2003005	5110		A1	20030320	US 2002-207777		2	20020731
US	6858647			B2	20050222				
PRIORIT	Y APPLN.	INFO	. :			FR 2000-1206	1	A 2	20000131
						WO 2001-FR280	1	1 2	20010130

IT 353264-58-1 353264-62-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (USes)

(pharmaceutical compns. containing retinoid-type compds. as antibacterial
agents)

RN 353264-58-1 CAPLUS

CN Benzoic acid, 4-[[2-[(nonyloxy)imino]-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

RN 353264-62-7 CAPLUS

CN Benzoic acid, 4-[[2-[(heptyloxy)imino]-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 21 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

AB The retinoid 6-[3-(1-adamantyl)-4-hydroxyphenyl]-2-naphthalenecarboxylic acid (ABFN) is reported to have anticancer activity in vivo. Induction of cell cycle arrest and apoptosis in cancer cell lines refractory to standard retinoids suggests a retinoid-independent mechanism of action for AHFN. Conformational studies suggested that binding of AHFN does not induce an unusual conformation in retinoic acid receptor (RAR) γ. The 3-chloro AHFN analog MMI1453 inhibited the growth of both retinoid-resistant (HL-60R leukemia, MDA-MB-231 breast, and H262 lung) and retinoid-sensitive (MCF-7 breast, LNCaP prostate, and H460 lung) cancer cell lines by inducing apoptosis at similar concns. Before apoptosis, MM11453 induced transcription factor TR3 expression and loss of mitochondrial membrane potential characteristic of apoptosis. MM11453 lacked the ability to significantly activate RARs and retinoid X receptor a to initiate (TRSpall2-tk-CAT reporter transcription. These results, differential proteolysis-sensitivity assays, and glutathione S-transferase-pulldown expts. demonstrate that, unlike AHPN or the natural or standard synthetic retinoids, MM11453 does not behave as a RAR or retinoid X receptor a transcriptional agonist. These studies strongly suggest that AHPN exerts its cell cycle arrest and apoptotic activity by a signaling pathway independent of retinoid receptor activation.

ACCESSION NUMBER: 2001:465871 CAPLUS

DOCUMENT NUMBER: 135:282801

TITLE: Apoptosis induction in cancer cells by a novel

analogue of 6-[3-(1-adamantyl)-4-hydroxyphenyl]-2naphthalenecarboxylic acid lacking retinoid receptor

transcriptional activation activity

AUTHOR(S): Dawson, Marcia I.; Hobbs, Peter D.; Peterson, Valerie J.; Leid, Mark; Lange, Christopher W.; Feng, Kai-Chia;

Chen, Guo-Quan; Gu, Jian; Li, Hui; Kolluri, Siva Kumar; Zhang, Xiao-Kun; Zhang, Yuxiang; Fontana,

Joseph A.

CORPORATE SOURCE: Department of Medicinal Chemistry, Molecular Medicine

Research Institute, Mountain View, CA, 94043, USA SOURCE: Cancer Research (2001), 61(12), 4723-4730

CODEN: CNREA8; ISSN: 0008-5472

PUBLISHER: American Association for Cancer Research

DOCUMENT TYPE: Journal LANGUAGE: English

T 262433-54-5, BMS270394

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(apoptosis induction in cancer cells by AHPN analog lacking retinoid receptor transcriptional activation activity)

RN 262433-54-5 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[(2R)-2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 44 THERE ARE 44 CAPLUS RECORDS THAT CITE THIS RECORD (44 CITINGS)

REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 22 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

AB The invention provides compns. comprising a retinoid X receptor agonist and an agent capable of activating protein kinase A. The invention also

provides methods of treating hyperproliferative diseases by administering a retinoid X receptor agonist and an agent capable of activating protein kinase A.

ACCESSION NUMBER: 2000:772398 CAPLUS

DOCUMENT NUMBER: 133:344604

TITLE: Compositions and methods using a retinoid X receptor agonist and a protein kinase A activator for treatment

of hyperproliferative diseases INVENTOR(S): Benoit, Gerard; Gronemever, Hinrich; Lanotte, Michel;

Gottardis, Marco

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA; Institut National de la Sante et de la Recherche Medicale; Centre

National de la Recherche Scientifique; Universite Louis Pasteur

SOURCE: PCT Int. Appl., 80 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2000064260	A1 2000	1102 WO 1999-US8908	19990423
W: AU, CA, JP,	MX		
RW: AT, BE, CH,	CY, DE, DK,	ES, FI, FR, GB, GR, IE, IT,	LU, MC, NL,
PT, SE			
CA 2369910	A1 2000	1102 CA 1999-2369910	19990423
AU 9941815	A 2000	1110 AU 1999-41815	19990423
AU 773928	B2 2004	0610	
EP 1173061	A1 2002	0123 EP 1999-925558	19990423
R: AT, BE, CH,	DE, DK, ES,	FR, GB, GR, IT, LI, LU, NL,	SE, MC, PT,
IE, FI			
JP 2002542268	T 2002	1210 JP 2000-613263	19990423
PRIORITY APPLN. INFO.:		WO 1999-US8908 T	19990423
IT 185629-22-5			

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(retinoid X receptor agonist and protein kinase A activator for treatment of hyperproliferative disease)

RN 185629-22-5 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

OS.CITING REF COUNT: THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

REFERENCE COUNT: THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 23 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

AB The human retinoic acid receptor (hRAR) belongs to the family of nuclear receptors that regulate transcription in a ligand-dependent way. The isotypes RAR α, β and γ are distinct pharmacol. targets for retinoids that are involved in the treatment of various skin diseases and cancers, in particular breast cancer and acute promyelocytic leukemia. Therefore, synthetic retinoids have been developed aiming at isotype selectivity and reduced side-effects. We report the crystal structures of three complexes of the hRARy ligand-binding domain (LBD) bound to agonist retinoids that possess selectivity either for RARy (BMS184394) or for RARB/y (CD564), or that are potent for all RAR-isotypes (panagonist BMS181156). The high resolution data (1.3-1.5 A) provide a description at the atomic level of the ligand pocket revealing the mol. determinants for the different degrees of ligand selectivity. The comparison of the complexes of the chemical closely related retinoids BMS184394 and CD564 shows that the side-chain of Met272 adopts different conformations depending on the presence of a hydrogen bond between its sulfur atom and the ligand. This accounts for their different isotype selectivity. On the other hand, the difference between the panand the RAR β , γ -selective agonist is probably due to a steric discrimination at the level of the 2-naphthoic acid moiety of CD564. Based on this study, we propose a model for a complex with the RARy-specific agonist CD666 that shows the possible applications for structure-based drug design of RAR isotype-selective retinoids. (c) 2000 Academic Press.

ACCESSION NUMBER: 2000:605439 CAPLUS

DOCUMENT NUMBER: 134:476

TITLE: Structural basis for isotype selectivity of the human

retinoic acid nuclear receptor

AUTHOR(S): Klaholz, Bruno P.; Mitschler, Andre; Moras, Dino CORPORATE SOURCE: Laboratoire de Biologie et Genomique Structurales,

Institut de Genetique et de Biologie Moleculaire et Cellulaire, CNRS/INSERM/ULP, Illkirch, F-67404, Fr.

SOURCE: Journal of Molecular Biology (2000), 302(1), 155-170

CODEN: JMOBAK; ISSN: 0022-2836

PUBLISHER: Academic Press

DOCUMENT TYPE: Journal

LANGUAGE: English

IT 262433-54-5, BMS270394 288573-98-8, BMS270395

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(structural basis for isotype selectivity of human retinoic acid

nuclear receptor) N 262433-54-5 CAPLUS

RN 262433-54-5 CAPLUS CN Benzoic acid. 3-fluo

Benzoic acid, 3-fluoro-4-[[(2R)-2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.

RN 288573-98-8 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[(2S)-2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME) Absolute stereochemistry.

OS.CITING REF COUNT: 63 THERE ARE 63 CAPLUS RECORDS THAT CITE THIS

RECORD (63 CITINGS)

REFERENCE COUNT: 69 THERE ARE 69 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 24 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

AB A practical procedure to prepare enantiomerically pure α -hydroxy amides from chiral α -hydroxy acids and electron-deficient anilines via N-sulfinvlanilines was developed.

ACCESSION NUMBER: 2000:528809 CAPLUS

DOCUMENT NUMBER: 133:309734
TITLE: Reaction of electron-deficient N-sulfinylanilines with

chiral α-hydroxy acids: a new process for the

synthesis of enantiomerically pure α -hydroxy amides

AUTHOR(S): Chidambaram, R.; Zhu, J.; Penmetsa, K.; Kronenthal,

D.; Kant, J.

CORPORATE SOURCE: Department of Process Research, Bristol-Myers Squibb,

Pharmaceutical Research Institute, New Brunswick, NJ,

08903-0191, USA

SOURCE: Tetrahedron Letters (2000), 41(32), 6017-6020

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 133:309734

IT 301674-62-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of α -hydroxy amides by reaction of electron-deficient N-sulfinylanilines with chiral α -hydroxy acids)

RN 301674-62-4 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[(2R)-2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyllaminol-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

AB

THERE ARE 10 CAPLUS RECORDS THAT CITE THIS OS.CITING REF COUNT: 10

RECORD (10 CITINGS)

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

1.7 ANSWER 25 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

The pleiotropic effects of the natural and synthetic retinoids are mediated by the activation of the two subfamilies of nuclear receptors, the retinoic acid receptors (RARs) and the retinoic X receptors (RXRs). At the mol. level, these events begin with the specific ligand recognition by a nuclear receptor subtype. The adaptation of ligands to the receptor binding site leads to an optimal number of interactions for binding and selectivity which justifies elucidation of the structural requirements of the ligand binding pocket. To explore the contribution of H6-H7 loop folding in the ligand-induced conformational changes explained by the mouse-trap model, four RARa mutants were constructed. Ligand binding and transactivation studies revealed that three residues from the H6-H7 loop (Gly301, Phe302 and Gly303) are critical for the conformational adaptation of both synthetic agonists and antagonists. Model building and anal. of both RARQ-ATRA and RARQ-CD 367 complexes demonstrate that accommodation of CD 367 results in a less tight contact of the saturated ring of this ligand with the amino acid side chains of the receptor ligand-binding pocket compared with that of ATRA. According to the flexibility of the agonists tested (ATRA > TTNPB = Am 580 > CD 367), we observed a decrease in binding that was dependent on ligand structure rigidity. In contrast, the binding and transactivating activities of the L266A mutant confirmed the structural constraints imposed by synthetic ligands on binding affinity for the receptor and revealed that subtle local rearrangements induced by specific conformational adaptation changes result in different binding affinities. Our results illustrate the dynamic nature of the interaction between RARa and its ligands and demonstrate the critical role of the H6-H7 loop in the binding of both synthetic retinoid agonists and antagonists.

ACCESSION NUMBER: 2000:439081 CAPLUS

DOCUMENT NUMBER: 133:188067

TITLE: Critical role of the H6-H7 loop in the conformational adaptation of all-trans retinoic acid and synthetic

retinoids within the ligand-binding site of RARa AUTHOR(S): Mailfait, S.; Thoreau, E.; Belaiche, D.; Formstecher,

P.; Sablonniere, B. CORPORATE SOURCE: INSERM U459, Faculte de Medecine Henri Warembourg,

Lille, 59045, Fr. SOURCE:

Journal of Molecular Endocrinology (2000), 24(3),

353-364

CODEN: JMLEEI; ISSN: 0952-5041 PUBLISHER: Society for Endocrinology

DOCUMENT TYPE: Journal LANGUAGE: English

IT 182205-87-4, CD 2815 182205-89-6, CD 2817

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)

(critical role of H6-H7 loop in conformational adaptation of retinoids within ligand-binding site of $RAR\alpha$)

RN 182205-87-4 CAPLUS

CN Benzoic acid, 4-[[(2E)-[[(8-hydroxyoctyl)oxy]imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 182205-89-6 CAPLUS

CN Benzoic acid, 4-[[(2E)-[[(7-hydroxyheptyl)oxy]imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

OS.CITING REF COUNT:

THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

.7 ANSWER 26 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

AB The human retinoic acid receptor (hRRR) is a member of the nuclear receptor superfamily that regulates the transcription of target genes in a ligand-dependent manner. The three hRRR isotypes are targets for retinoids that are used in the treatment of various diseases, including breast cancer and skin diseases. Drug efficiency and safety depend on the pharmacol. activity of enantiomers, which can differ because of the chiral environment generated by the target. The authors report the crystal structures of the hRRRy ligand-binding domain bound to two enantiomers, the active BMS270394 and the inactive BMS270395, solved at 1.6 Å and 1.7 Å resolution, resp. The crystal structures reveal that in both enantiomers, the hydroxyl moiety attached to the chiral center forms a hydrogen bond to the Met-272 sulfur atom, thus imposing a conformation of BMS270395 that differs significantly from that observed for

BMS270394 and other known retinoids. BMS270395 adopts an energetically unfavorable conformation, accounting for its inactivity; in contrast, the conformation of BMS270394 is close to an energy min. The authors high-resolution data allow rationalization of enantiomer discrimination by the receptor and provide a model system for the pharmacol. properties of

enantiomeric pairs.

ACCESSION NUMBER: 2000:412005 CAPLUS

DOCUMENT NUMBER: 133:171785

TITLE: Enantiomer discrimination illustrated by

high-resolution crystal structures of the human

nuclear receptor hRARγ

AUTHOR(S): Klaholz, Bruno P.; Mitschler, Andre; Belema, Makonen;

Zusi, C.; Moras, Dino

CORPORATE SOURCE: Laboratoire de Biologie et Genomique Structurales, Institut de Genetique et de Biologie Moleculaire et

Cellulaire, Centre National de la Recherche Scientifique/Institut National de la Sante et de la

Recherche Medicale/Universite Louis Pasteur, Illkirch, F-67404, Fr.

SOURCE: Proceedings of the National Academy of Sciences of the

United States of America (2000), 97(12), 6322-6327

CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences

PUBLISHER: National Academy of Science
DOCUMENT TYPE: Journal

LANGUAGE: English

IT 262433-54-5, BMS 270394 288573-98-8, BMS 270395

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)

(retinoid enantiomer discrimination illustrated by high-resolution crystal

structures of human nuclear retinoic acid receptor gamma (hRARy))
RN 262433-54-5 CAPLUS

N 262433-54-5 CAPLUS Benzoic acid, 3-fluoro-4-[[(2R)-2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.

RN 288573-98-8 CAPLUS

Benzoic acid, 3-fluoro-4-[[(2S)-2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: THERE ARE 45 CAPLUS RECORDS THAT CITE THIS 45

RECORD (45 CITINGS)

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 27 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

AB Disclosed is the (R)-enantiomer of formula I, which has unexpectedly been found to possess all of the biol. activity of the racemic compound disclosed in the prior art as an RARy-specific agonist, for the treatment of dermatol. disorders, such as acne, psoriasis, premalignant lesions, and actinic keratosis. A method for the prevention of spontaneous squamous cell carcinoma in immunocompromised human transplant patients comprises systemic administration of a therapeutically effective amount of the compound I. The compound I at doses of 15 mg/kg or higher reduced both the number and size of papillomas in a mouse skin carcinogenesis model, while

13-cis-retinoic acid at 50 mg/kg was inactive under these conditions. ACCESSION NUMBER: 2000:209902 CAPLUS

DOCUMENT NUMBER: 132:246379

TITLE: Active enantiomer of RARy-specific agonist

INVENTOR(S): Belema, Makonen; Zusi, Fred C.; Tramposch, Kenneth M.

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: PCT Int. Appl., 32 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA:	FENT	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D.	ATE		
						-												
WO 2000016769				A1	A1 20000330				WO 1		19990921							
	W:	AE,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	
		DE,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	
		KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	

MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG CA 2344919 A1 20000330 CA 1999-2344919 19990921 AU 9960565 Α 20000410 AU 1999-60565 19990921 EP 1115395 A1 20010718 EP 1999-969335 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO 20011218 US 6331570 В1 US 1999-401356 19990921 JP 2002526445 Т 20020820 JP 2000-573730 19990921 PRIORITY APPLN. INFO.: US 1998-101747P P 19980924 US 1999-125891P P 19990324 WO 1999-US21920 W 19990921

IT 262433-64-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(naphthylacetamidobenzoate derivative as RAR γ -specific agonist for treatment of dermatol. disorders)

RN 262433-64-7 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[(2S)-2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propen-1-yl ester (CA INDEX NAME)

Absolute stereochemistry.

IT 262433-54-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(naphthylacetamidobenzoate derivative as RARy-specific agonist for treatment of dermatol. disorders)

RN 262433-54-5 CAPLUS

N Benzoic acid, 3-fluoro-4-[[(2R)-2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.

IT 262433-56-7P 262433-57-8P 262433-58-9P

262433-59-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (naphthylacetamidobenzoate derivative as RARy-specific agonist for

treatment of dermatol. disorders)
RN 262433-56-7 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[2-oxo-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naohthalenyl)acetylamino|-, 2-propen-1-yl ester (CA INDEX NAME)

RN 262433-57-8 CAPLUS

Me Me

CN Benzoic acid, 3-fluoro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propen-1-yl ester (CA INDEX NAME)

RN 262433-58-9 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[(2R)-2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propen-1-yl ester (CA INDEX NAME)

Absolute stereochemistry.

262433-59-0 CAPLUS RN

CM Benzeneacetic acid, α -methoxy- α -(trifluoromethyl)-, (1R)-2-[[2-fluoro-4-[(2-propen-1-yloxy)carbony1]pheny1]amino]-2-oxo-1-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)ethyl ester, (αR) - (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

REFERENCE COUNT: 1

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 28 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

Many synthetic retinoids have been generated that exhibit a distinct AB pattern of agonist/antagonist activities with the three retinoic acid receptors (RARα, RARβ and RARγ). Because these retinoids are selective tools with which to dissect the pleiotropic functions of the natural pan-agonist, retinoic acid, and might constitute new therapeutic drugs, we have determined the structural basis of their receptor specificity and compared their activities in animal and yeast cells. There are only three divergent amino acid residues in the ligand binding pockets (LBPs) of RARa, RARB and RARy. We demonstrate here that the ability of monospecific (class I) retinoid agonists and antagonists to bind to and induce or inhibit transactivation by a given isotype is directly linked to the nature of these residues. The agonist/antagonist potential of class II retinoids, which bind to all three RARs but depending on the RAR isotype have the potential to act as agonists or antagonists, was also largely determined by the three divergent LBP residues. These mutational studies were complemented by modeling, on the basis of the three-dimensional structures of the RRR ligand-binding domains, and a comparison of the retinoid agonist/antagonist activities in animal and yeast cells. Our results reveal the rational basis of RAR isotype selectivity, explain the existence of class I and II retinoids, and provide a structural concept of ligand-mediated antagonism. Interestingly, the agonist/antagonist characteristics of retinoids are not conserved in yeast cells, suggesting that yeast co-regulators interact with RARs in a different way than the animal cell homologues do.

ACCESSION NUMBER: 1999:548430 CAPLUS

DOCUMENT NUMBER: 131:281022

TITLE: Structural basis for engineering of retinoic acid receptor isotype-selective agonists and antagonists AUTHOR(S): Gehin, Martine; Vivat, Valerie; Wurtz, Jean-Marie;

Losson, Regine; Chambon, Pierre; Moras, Dino;

Gronemeyer, Hinrich

CORPORATE SOURCE: Institut de Genetique et de Biologie Moleculaire et Cellulaire (IGBMC), CNRS/INSERM/ULP/College de France,

Illkirch, 67404, Fr.

SOURCE: Chemistry & Biology (1999), 6(8), 519-529

CODEN: CBOLE2; ISSN: 1074-5521
PUBLISHER: Current Biology Publications

DOCUMENT TYPE: Journal LANGUAGE: English

IT 185629-22-5, BMS961

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)

(structural basis for engineering of RAR isotype-selective agonists and antagonists)

RN 185629-22-5 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 56 THERE ARE 56 CAPLUS RECORDS THAT CITE THIS RECORD (56 CITINGS)

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

7 ANSWER 29 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

AB Structure-activity relationships were established for 140 synthetic retinoid agonists. Retinoids, natural and synthetic analogs of vitamin λ, are activating ligands for retinoic acid receptors (RaRu, β, and γ), members of the nuclear receptor superfamily. A QSAR study provides information on the type of intermol. and intramol. interactions the active mols. are exposed to during the course of their interaction with the receptor. Retinoid structures were modeled both by mol. and quantum mechanics and were submitted to a preliminary conformational anal. based on mol. dynamics. Linear and non-linear multivariate analyses were performed, revealing the principal electronic and structural characteristics leading to good affinity for each RAR subtype. Distinct structural features were found for each subtype: this is in agreement with the fact that the selectivity of the RAR subtypes results from the change

of amino acids in the ligand cavity. Indeed, these amino-acids induce subtle changes in terms of steric properties and specific interactions, thus engendering specificity. The predictive ability of these relationships was validated using a large set of compds. which were not used to derive the model. The goal this of work was to detect relationships between structures and affinity for a broad range of retinoids in order that this model could be used in a more general manner, for example to impose constraints in database searching, or for use in automatic structure generation software.

ACCESSION NUMBER: 1999:455007 CAPLUS

DOCUMENT NUMBER: 131:194472

TITLE: Quantitative structure-activity relationship studies

of RAR α, β, γ retinoid agonists

AUTHOR(S): Douguet, Dominique; Thoreau, Etienne; Grassy, Gerard CORPORATE SOURCE: Centre International Recherches Dermatologie GALDERMA,

Sophia Antipolis, F-06902, Fr.

Quantitative Structure-Activity Relationships (1999), SOURCE:

18(2), 107-123

CODEN: QSARDI; ISSN: 0931-8771 PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal LANGUAGE: English

139611-80-6 142650-22-4 142650-36-0

241140-07-8 241140-28-3

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(QSAR studies of retinoic acid receptors α, β, γ retinoid agonists)

RN 139611-80-6 CAPLUS

CN Benzoic acid, 4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2naphthalenvl)acetyl]amino]- (CA INDEX NAME)

RN 142650-22-4 CAPLUS

CN Benzoic acid, 4-[[2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2naphthalenyl)acetyl]amino]- (CA INDEX NAME)

RN 142650-36-0 CAPLUS

CN Benzoic acid, 4-[[2-oxo-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethy1-2naphthalenyl)acetyl]amino]- (CA INDEX NAME)

RN 241140-07-8 CAPLUS

CN Benzoic acid, 4-[[2-(hydroxyimino)-2-(5,6,7,8-tetrahydro-5,5,8,8tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

RN 241140-28-3 CAPLUS

Benzoic acid, 4-[[2-(propoxyimino)-2-(5,6,7,8-tetrahydro-5,5,8,8tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

OS.CITING REF COUNT:

THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD

(10 CITINGS)

REFERENCE COUNT: THERE ARE 77 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 30 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

AB R4C(:X)NR3ZCRR1R2 [I; R = pyrrolyl, imidazolyl, triazolyl, pyridinyl, etc.; R1 = H, OH, alkyl, aryl; R2 = H, (un)substituted alkyl, (hetero)aryl, etc.; R3 = H, (ar)alkyl, (hetero)aryl, etc.; R4 = H, OH, (un) substituted alkyl, alkoxy, etc.; X = 0, S, NR3; Z = 1,4-phenylene] were prepared Thus, 4-(AcHN)C6H4CHRCHMe2 (II; R = OH) was O-mesylated and the product condensed with 1H-1,2,4-triazole to give II (R =

1H-1,2,4-triazol-1-yl). Data for biol. activity of I were given.

ACCESSION NUMBER: 1999:388171 CAPLUS DOCUMENT NUMBER: 131:44827

TITLE: Preparation of N-[(imidazolvl- and

triazolylalkyl)phenyl]acetamides and analogs as

retinoid metabolism inhibitors

INVENTOR(S): Mabire, Dominique; Adelinet, Christophe Denis; Csoka,

Imre Christian; Venet, Marc Gaston PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.

SOURCE: PCT Int. Appl., 75 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

		ENT I				KINI)	DATE		APPLICATION NO.										
		9929								WO 1998-EP8126										
		W:	AL.	AM.	AT.	AU.	AZ.	BA.	BB.	BG.	BE	λ. В	Υ.	CA.	CH.	CN.	CU.	CZ,	DE.	
			DK,	EE.	ES,	FI.	GB,	GE,	GH,	GM,	HE	λ, н	U,	ID,	IL,	IN.	IS,	JP,	KE,	
																		MN,		
																		TM,		
								VN,												
		RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZV	1, A	Τ,	BE,	CH,	CY,	DE,	DK,	ES,	
			FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NI	, P	т,	SE,	BF,	BJ,	CF,	CG,	CI,	
								MR,												
С	Α	2312	720			A1		1999	0617		CA	199	8-2	312	720		1	9981	208	
A	U	9921	808			A		1999	0628		ΑU	199	9 - 2	160	8		1	9981	208	
E	P	1037	880			A1		2000	0927		EΡ	199	8-9	658	20		3	9981	208	
E	P	1037	880			B1		2004	0630											
		R:							FR,	GB,	GE	R, I	Τ,	LI,	LU,	NL,	SE,	MC,	PT,	
			ΙE,	SI,	LT,	LV,	FI,	RO												
T	R	2000 2001	0164	5		T2		2000	1221		TR	200	0-1	645			1	9981	208	
H	U	2001	0008	60		A2		2001	0928		HU	200	1 - 8	60			1	9981	208	
H	U	2001	0008	60		A3		2003	0328											
J	P	2001 2001 2702 2224	5254	00		T		2001	1211		JP	200	0-5	242	71		1	9981 9981	208	
A	Т	2702	77			T		2004	0715		AΤ	199	8-9	658	20		1	9981	208	
E	S	2224	462			Т3		2005	0301		ES	199	8-9	658	20		1	9981	208	
T	W	5235	03			В		2003	0311		TW	199	8-8	712	0384		1	9981	209	
Z	Α	9811	351			A		2000	0612		ZA	199	8-1	135	1		1	9981	210	
Ü	IS	9811 6319 1044 2002	939			В1		2001	1120		US	200	0-5	557	75		2	9981 9981 0000 0000	601	
В	G	1044	99			A		2001	0831		BG	200	0-1	044	99		2	0000	602	
U	S	2002	0115	653		A1		2002	0822		US	200	1-9	625.	51		2	0010	925	
		6936				B2		2005							_					
0	S	2005	0165	018		A1		2005	0728		US	200	5-8	139.	3		2	0050	316	
U	15	/1/9	825			BZ		2007	0220											
U	15	2007	0105	858		Al		2007	0510		US	200	6-5	510	45 99		- 4	0061		
U	15	7179 2007 2008 7579	0058.	334		AI		2008	0306		US	200	7-9	266	99		- 2	0071	029	
u PRIORI	15	1519.	352			BZ		2009	0825			100		000				9971	011	
PRIORI	II	APP.	LIV.	INFO	. :															
											WO	199	8-E	P81.	26		// I	9981	208	
								2009			US	200	1 0	00/	/5		H.J 2	0000 0010 0050	POT	
											05	200	T-3	120) T		MJ 2	0010	325	
											110	200	2-8	139.	A E		MJ 2	0050	010	
											US	200	6-5	DIO.	45		AT 2	0001	019	

OTHER SOURCE(S): MARPAT 131:44827

IT 227280-03-7P 227282-05-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-[(imidazolyl- and triazolylalkyl)phenyl]acetamides and analogs as retinoid metabolism inhibitors)

RN 227280-03-7 CAPLUS

CN 2-Naphthaleneacetamide, N-[4-[2-ethyl-1-(1H-imidazol-1-yl)butyl]phenyl]5,6,7,8-tetrahydro-5,5,8,8-tetramethyl- (CA INDEX NAME)

RN 227282-05-5 CAPLUS

AB

CN 2-Naphthaleneacetamide, 5,6,7,8-tetrahydro-N-[4-[1-(1H-imidazol-1-yl)-2-methylpropyl]phenyl]-5,5,8,8-tetramethyl- (CA INDEX NAME)

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 31 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

All-trans and 9-cis retinoic acids (RA) signals are transduced by retinoic acid receptor/retinoid X receptor (RAR/RXR) heterodimers that act as functional units controlling the transcription of RA-responsive genes. With the aim of elucidating the underlying mol. mechanisms, we have developed an in vitro transcription system using a chromatin template made up of a minimal promoter and a direct repeat with 5-spacing-based RA response element. RARa and RXRa were expressed in and purified from baculovirus-infected Sf9 cells, and transcription was carried out by using naked DNA or chromatin templates. Transcription from naked templates was not affected by the presence of RA and/or RAR/RXR heterodimers. In contrast, very little transcription occurred from chromatin templates in the absence of RA or RAR/RXR heterodimers whereas their addition resulted in a dosage-dependent stimulation of transcription that never exceeded that occurring on naked DNA templates. Most importantly, the addition of synthetic agonistic or antagonistic retinoids to the chromatin transcription system mimicked their stimulatory or inhibitory action in vivo, and activation by a RXR-specific retinoid was subordinated to the binding of an agonist ligand to the RAR partner. Moreover, the addition of the p300 coactivator generated a synergistic enhancement of transcription. Thus, the dissection of this transcription system ultimately should lead to the elucidation of the mol. mechanisms by which RAR/RXR heterodimers control transcription in a ligand-dependent manner.

ACCESSION NUMBER: 1999:180902 CAPLUS DOCUMENT NUMBER: 130:347807

TITLE: Ligand-dependent activation of transcription in vitro by retinoic acid receptor α/ret inoid X receptor α heterodimers that mimics transactivation by

retinoids in vivo
AUTHOR(S): Dilworth, F. Jeffrey; Fromental-Ramain, Catherine;

Remboutsika, Eumorphia; Benecke, Arndt; Chambon,

Pierre

CORPORATE SOURCE: Institut de Genetique et de Biologie Moleculaire et

Cellulaire, Centre National de la Recherche Scientifique, Institut National de la Sante et de la

Recherche Medicale, Universite Louis Pasteur,

Illkirch, 67404, Fr.

Proceedings of the National Academy of Sciences of the SOURCE:

United States of America (1999), 96(5), 1995-2000

CODEN: PNASA6; ISSN: 0027-8424

PUBLISHER: National Academy of Sciences

DOCUMENT TYPE: Journal LANGUAGE: English

185629-22-5, BMS 961

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(ligand-dependent activation of transcription in vitro by retinoic acid receptor α/retinoid X receptor α heterodimers that mimics

transactivation by retinoids in vivo)

RN 185629-22-5 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-

tetramethy1-2-naphthaleny1)acety1[amino]- (CA INDEX NAME)

OS.CITING REF COUNT: THERE ARE 34 CAPLUS RECORDS THAT CITE THIS 34

RECORD (34 CITINGS)

REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 32 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

AB A method of inhibiting endothelin-1 in a subject, comprising administering

to the subject an inhibiting amount of a suitable retinoid or retinoid-related mol., and a method of treating pain and diseases associated

with the presence of increased levels of endothelin-1 in subjects. comprising administering an endothelin-l-inhibiting amount of a suitable

retinoid or retinoid-related mol., are provided.

ACCESSION NUMBER: 1998:706047 CAPLUS DOCUMENT NUMBER: 129:310907

ORIGINAL REFERENCE NO.: 129:63301a,63304a

TITLE: Retinoid-related molecules for the inhibition of

endothelin-1 overproduction in disease and for

treating pain

Pfahl, Magnus; Hsu, Ju-Yu INVENTOR(S):

PATENT ASSIGNEE(S): Sidney Kimmel Cancer Center, USA

PCT Int. Appl., 88 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

SOURCE:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9846076	A1	19981022	WO 1998-US7125	19980410

```
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
             UA, UG, US, UZ, VN, YU, ZW
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, ML, MR, NE, SN, TD, TG
     AU 9868951
                                            AU 1998-68951
                          A
                                19981111
                                                                    19980410
     EP 973390
                          A1
                                20000126
                                           EP 1998-914647
                                                                    19980410
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
     BR 9808866
                                20000801
                                            BR 1998-8866
                                                                    19980410
                          Α
     JP 2001522350
                          Т
                                20011113
                                            JP 1998-531346
                                                                    19980410
     MX 9909322
                          Α
                                20000228
                                            MX 1999-9322
                                                                    19991008
PRIORITY APPLN. INFO .:
                                            US 1997-43293P
                                                                   19970411
                                            WO 1998-US7125
                                                                 W 19980410
```

OTHER SOURCE(S): MARPAT 129:310907 IT 166182-23-6 166182-23-6D, derivs.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(retinoid related mols. for the inhibition of endothelin-1 overprodn. in disease and for treating pain)

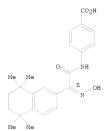
RN 166182-23-6 CAPLUS

EN Benzoic acid, 4-[[(2Z)-(hydroxyimino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 166182-23-6 CAPLUS

CN Benzoic acid, 4-[[(2Z)-(hydroxyimino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (9CI) (CA INDEX NAME)



OS.CITING REF COUNT:

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 1 THERE ARE 1 CITE

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 33 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN
AB The nuclear retinoid receptors RARs and RXRs are transcriptional

regulators whose activity is mediated by their ligand-binding domain. crystal structures of the unliganded human (apo) hRXRa ligand-binding domain and of the all-trans retinoic acid-liganded (holo) hRARy ligand-binding domain have been described. The authors report the crystal structures of the hRARy ligand-binding domain bound to either its other natural ligand 9-cis retinoic acid, or an RARy-selective synthetic agonist (BMS961). The two bound RA stereoisomers exhibit a striking structural resemblance, as their intrinsic flexibility allows them to fit into a unique ligand-binding pocket. The shape of BMS961 is a combination of those of the natural ligands and an addnl. RARy-specific hydrogen bond is responsible for the RARg isotype selectivity. All three agonist mols, fill almost entirely the ligand cavity and lead to an identical holo-ligand-binding domain protein conformation, thus accounting for their similar effect on RAR transactivation. The selectivity of different RAR ligands can now be explained using BMS961 as a template. The present conclusions are not limited to RARy and can be extended to the other members of the

retinoid family.
ACCESSION NUMBER: 1998:191348 CAPLUS
DOCUMENT NUMBER: 129:1856

ORIGINAL REFERENCE NO.: 129:463a,466a

TITLE: Conformational adaptation of agonists to the human

nuclear receptor RARy

AUTHOR(S): Klaholz, B. P.; Renaud, J.-P.; Mitschler, A.; Zusi, C.; Chambon, P.; Gronemeyer, H.; Moras, D.

CORPORATE SOURCE: Institut de Genetique et de Biologie Moleculaire et

Cellulaire, Universite Louis Pasteur, Illkirch,

F-67404, Fr.

SOURCE: Nature Structural Biology (1998), 5(3), 199-202

CODEN: NSBIEW; ISSN: 1072-8368

PUBLISHER: Nature America

DOCUMENT TYPE: Journal LANGUAGE: English

IT 185629-22-5, BMS961

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP

(Properties); BIOL (Biological study); PROC (Process) (crystal structures of human retinoic acid receptor y complexes with ligands and agonist BMS961 show conformational adaptation of ligands)

185629-22-5 CAPLUS

Benzoic acid, 3-fluoro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

OS.CITING REF COUNT:

97 THERE ARE 97 CAPLUS RECORDS THAT CITE THIS RECORD (97 CITINGS)

REFERENCE COUNT:

THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

29 ANSWER 34 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

Methods and compns. are provided for treating an animal, preferably a AB human, suffering from or predisposed to a phys. disorder by administering an effective amount of a composition comprising at least one RAR antagonist, preferably an RARα antagonist, and at least one RXR agonist. The combination of an RXR agonist, which has no therapeutic effects alone, with an RAR antagonist allows the use of lower doses of the RAR antagonist than were previously thought to be efficacious; this approach obviates many of the undesirable physiol. side-effects of treatment with RAR antagonists.

ACCESSION NUMBER: 1998:163484 CAPLUS DOCUMENT NUMBER: 128:213409

ORIGINAL REFERENCE NO.: 128:42141a, 42144a

TITLE: Therapeutic combinations of RAR antagonists and RXR

agonists

INVENTOR(S): Chambon, Pierre; Gronemeyer, Hinrich; Reczek, Peter

R.; Ostrowski, Jacek

Institut National De La Sante Et De La Recherche PATENT ASSIGNEE(S): Medicale, Fr.; Centre National De La Recherche

Scientifique: Universite Louis Pasteur: Bristol-Myers

Squibb Company

SOURCE: PCT Int. Appl., 51 pp.

CODEN: PIXXD2 Patent

DOCUMENT TYPE: LANGUAGE: Enalish

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	TENT	NO.			KIN	D	DATE		API	PLICA	TION I	NO.		DA:	ΓE		
						-											
OW	9808	546			A2		1998	0305	WO	1997-	-US15	155		199	9708	328	
ΜO	9808	546			A3		1998	0423									
	W:	AU,	CA,	IL,	JP,	MX,	NO										
	RW:	AT,	BE,	CH,	DE,	DK,	ES,	FΙ,	FR, GE	3, GR,	IE,	IT,	LU,	MC, I	NL,	PT,	SE
CA	2263	817			A1		1998	0305	CA	1997-	-2263	817		199	9708	328	
ΑU	9741	674			A		1998	0319	AU	1997-	-4167	4		199	9708	328	
ΑU	7310	60			B2		2001	0322									
EΡ	9282	00			A2		1999	0714	EP	1997-	-9396	31		199	9708	328	
EΡ	9282	0.0			B1		2003	0409									

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IL, FI						
US 6130230	A	20001010	US	1997-919318		19970828
JP 2001500486	T	20010116	JP	1998-511906		19970828
AT 236654	T	20030415	AT	1997-939631		19970828
ES 2196361	Т3	20031216	ES	1997-939631		19970828
NO 9900912	A	19990427	NO	1999-912		19990225
US 6653322	B1	20031125	US	2000-619308		20000719
PRIORITY APPLN. INFO.:			US	1996-24772P	P	19960828
			US	1997-919318	A3	19970828
			WO	1997-US15155	W	19970828

IT 185629-22-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (therapeutic combinations of RAR antagonists and RXR agonists)

RN 185629-22-5 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

 $\mbox{L7} \mbox{ }$ ANSWER 35 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN GI

AB Retinobenzoic acid derivs. I (R1 - R6 = independently H, alkyl; R7 = H, carboxy protecting group; X = halo, alkyl, alkyloxy, OH, CP3; Y = H, F, Cl, Me; n = 1 - 4), potentially useful for treating dermatch: disorders, were prepared and tested for retinoid receptor activity. Derive. I selectively interact with the retinoic acid subtype receptor RARY and were found to lack the liver toxicity associated with systemic administration of non-selective retinoids. Thus, I [R1 - R4 = Me, (R5R6C)n = (CH2)2, R7 = Y = H, X = F] was prepared from 1,1,4,+tetramethyltetralin, ClCCO22Et, and 3-74-MO2C6H3Me and tested for retinoid receptor activation activity. I [R1 - R4 = Me, (R5R6C)n = (CH2)2, R7 = X = Y = H] showed transactivation ratios of 66.7, 50 and 6.7, compared with retinoic acid, for the α , β , and γ retinoid receptors, resp.

Ι

ACCESSION NUMBER: 1997:72260 CAPLUS

DOCUMENT NUMBER: 126:89602 ORIGINAL REFERENCE NO.: 126:17307a TITLE: Preparation and RARy-specific retinoid receptor

transactivation of retinobenzoic acid derivatives Swann, R. Thomas; Smith, Daniel; Tramposch, Kenneth

M.; Zusi, Fred Christopher

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: Eur. Pat. Appl., 19 pp. CODEN: EPXXDW

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

PAT	PATENT NO.						KIND DATE			APPLICATION NO.						DATE					
	EP 747347 EP 747347				A1 19961211 B1 19990721				EP 1996-401097							19960520					
	R:	AT,		CH,	DE,	DK,	ES,	FI,	FR,	GE	3, G	R,	IE,	IT,	LI,	LU	, MC	, NI	١,		
US	5624	957			A		1997	0429		US	199	5-4	674	29			1995	0606	5		
CA	2175	854			A1		1996	1207		CA	199	6-2	175	854			1996	0506	5		
AT	1823	27			T		1999	0815		ΑT	199	6-4	010	97			1996	0520)		
ES	2136	950			Т3		1999	1201		ES	199	6-4	010	97			1996	0520)		
JP	0833	3318			A		1996	1217		JP	199	6-1	426	21			1996	0605	5		
AU	9654	717			A		1996	1219		AU	199	6-5	471	7			1996	0605	5		
AU	6933	52			B2		1998	0625													
US	5760	084			A		1998	0602		US	199	6-7	249	79			1996	1004	4		
GR	3031	517			Т3		2000	0131		GR	199	9-4	026	12			1999	1013	3		
PRIORITY	APP	LN.	INFO	. :						US	199	5-4	674	29		A	1995	0606	5		
OTHER SO	URCE	(S):			MARI	PAT	126:	8960	2												
IT 139	611-	80-63	P	18	5629-	-22-	-5P	1:	8562	29-2	23-6	P									
185	629-	24-7	P	18	5629-	-25-	-8P	1:	8562	29-2	26-9	P									
185	629-	27-0	P	18	5629-	-28-	-1P	1:	8562	29-2	29-2	P									
185	629-	30-5	P																		

RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); DSES (Uses)

(preparation and RARY-specific retinoid receptor transactivation of retinobenzoic acid derivs.)

139611-80-6 CAPLUS

RN

CN Benzoic acid, 4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetvl]aminol- (CA INDEX NAME)

RN 185629-22-5 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

- RN 185629-23-6 CAPLUS
- CN Benzoic acid, 4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-3-(trifluoromethyl)- (CA INDEX NAME)

- RN 185629-24-7 CAPLUS
- CN Benzoic acid, 4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-3-methoxy- (CA INDEX NAME)

- RN 185629-25-8 CAPLUS
- CN Benzoic acid, 3-bromo-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

- RN 185629-26-9 CAPLUS
- CN Benzoic acid, 3-chloro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

- RN 185629-27-0 CAPLUS
- CN Benzoic acid, 3-hydroxy-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

- RN 185629-28-1 CAPLUS
- CN Benzoic acid, 4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-3-methyl- (CA INDEX NAME)

- RN 185629-29-2 CAPLUS
- CN Benzoic acid, 4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-3,5-dimethyl- (CA INDEX NAME)

- RN 185629-30-5 CAPLUS
- CN Benzoic acid, 3,5-dichloro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

IT 185629-33-8P 185629-34-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and RARγ-specific retinoid receptor transactivation of retinobenzoic acid derivs.)

RN 185629-33-8 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[2-oxo-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, methyl ester (CA INDEX NAME)

RN 185629-34-9 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, methyl ester (CA INDEX NAME)

OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

 $\mbox{L7}$ $\,$ ANSWER 36 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN GI

AB The title compds. [I; A = (un) substituted phenylene, pyridinediyl, furandiyl, thiophenediyl, etc.; R1 = (un) substituted Me, alkoxy, etc.; R2, R3 = H, (un) branched alkyl, alkoxy, alkylthio, etc.; R4 = H, halogen, alkyl, etc.; X = H, alkyl; Y = (un) substituted alkyl, etc.] [e.g., syn-4-(a-hydroxyhexyloxyimino-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthyl) acetamido| benzoic acid; m.p. 183-186°], useful in oblamaceutical (no data) and cosmetic formulations (no data),

are prepared and I-containing formulations presented.
ACCESSION NUMBER: 1996:628360 CAPLUS
DOCUMENT NUMBER: 125:275432

ORIGINAL REFERENCE NO.: 125:51501a,51504a

TITLE: Preparation of biaromatic amides and pharmaceutical and cosmetic compositions containing them

INVENTOR(S): Bernardon, Jean-Michel; Vigne, Laurence

PATENT ASSIGNEE(S): Centre International De Recherches Dermatologiques
Galderma (C.I.R.D. Galderma), Fr.

SOURCE: Eur. Pat. Appl., 24 pp.

CODEN: EPXXDW DOCUMENT TYPE: Patent

LANGUAGE: French FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT NO.		KIND	DATE	APPLICATION NO.	DATE
EP	728739		A1	19960828	EP 1996-400251	19960206
EP	728739		B1	19971105		
	R: AT, B	E, CH,	DE,	DK, ES, FR,	GB, GR, IE, IT, LI, I	LU, MC, NL, PT, SE
FR	2730995		A1	19960830	FR 1995-2133	19950223
FR	2730995		B1	19970404		
AT	159931		T	19971115	AT 1996-400251	19960206
ES	2113220		Т3	19980416	ES 1996-400251	19960206
AU	9644447		A	19960926	AU 1996-44447	19960212
AU	680162		B2	19970717		
ZA	9601147		A	19960823	ZA 1996-1147	19960213
CA	2170065		A1	19960824	CA 1996-2170065	19960222
CA	2170065		С	20010213		
JP	08291122		A	19961105	JP 1996-35257	19960222
JP	2957123		B2	19991004		
BR	9600612		A	19971230	BR 1996-612	19960223
US	5935585		A	19990810	US 1996-605960	19960223
US	6171603		B1	20010109	US 1999-246715	19990209
PRIORIT	Y APPLN. IN	FO.:			FR 1995-2133	A 19950223
					US 1996-605960	A3 19960223

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OTHER SOURCE(5): MARPAT 125:275432
IT 142650-89-3P 166182-61-2P 182206-01-5P
182206-02-6P 182206-03-7P 182206-04-8P
182206-05-9P 182206-06-0P 182206-07-1P
182206-09-3P 182206-10-6P
```

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of biarom. amides and pharmaceutical and cosmetic compns. containing them)

RN 142650-89-3 CAPLUS

N Benzoic acid, 4-[[2-oxo-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propen-1-yl ester (CA INDEX NAME)

- RN 166182-61-2 CAPLUS
- CN Benzoic acid, 4-[[2-(hydroxyimino)-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethy1-2-naphthaleny1)acety1]amino]-, 2-propen-1-y1 ester (CA INDEX NAME)

- RN 182206-01-5 CAPLUS
- CN Benzoic acid, 4-[[[[(8-hydroxyoctyl)oxy]imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propenyl ester, (Z)- (9CI) (CA INDEX NAME)

- RN 182206-02-6 CAPLUS
- CN Benzoic acid, 4-[[[[(7-hydroxyheptyl)oxy]imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propenyl ester, (Z)- (9CI) (CA INDEX NAME)

- RN 182206-03-7 CAPLUS
- CN Benzoic acid, 4-[[[(3-hydroxypropoxy)imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propenyl ester, (E)- (9CI) (CA INDEX NAME)

Me Me
$$E$$
 N O CH_2 OH

- RN 182206-04-8 CAPLUS
- CN Benzoic acid, 4-[[[[(10-hydroxydecy1)oxy]imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propenyl ester, (Z)- (9CI)(CA INDEX NAME)

- RN 182206-05-9 CAPLUS
- CN Benzoic acid, 4-[[[[(9-hydroxynonyl)oxy]imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propenyl ester, (2)- (9CI) (CA INDEX NAME)

- RN 182206-06-0 CAPLUS
- CN Benzoic acid, 4-[[[(phenylmethoxy)imino](5,6,7,8-tetrahydro-5,5,8,8tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propenyl ester, (2)- (9CI) (CA INDEX NAME)

- RN 182206-07-1 CAPLUS
- CN Benzoic acid, 4-[[1-oxo-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)-4,6,9-trioxa-3-azadec-2-en-1-yl]amino]-, 2-propenyl ester, (2) (9CI) (CA INDEX NAME)

- RN 182206-09-3 CAPLUS
- CN Benzoic acid, 4-[1]-oxo-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)-4,6,9-trioxa-3-azadec-2-en-1-yl]amino]-, methyl ester, (Z)-(9CI) (CA INDEX NAME)

- RN 182206-10-6 CAPLUS
- CN Benzoic acid, 4-[[1-oxo-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)-4,6,9-trioxa-3-azadec-2-en-1-yl]amino]-, methyl ester, (E)-(9CI) (CA INDEX NAME)

182205-82-9P 182205-81-8P 182205-83-0P 182205-84-1P 182205-85-2P 182205-86-3P 182205-87-4P 182205-88-5P 182205-89-6P 182205-90-9P 182205-91-0P 182205-92-1P 182205-93-2P 182205-94-3P 182205-95-4P 182205-96-5P 182205-97-6P 182205-98-7P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of biarom, amides and pharmaceutical and cosmetic compns. containing them)

- RN 182205-81-8 CAPLUS
- CN Benzoic acid, 4-[[[[(6-hydroxyhexyl)oxy]imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propenyl ester, (Z)- (9CI) (CA INDEX NAME)

RN 182205-82-9 CAPLUS

CN Benzoic acid, 4-[[[(6-hydroxyhexyl)oxy]imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 182205-83-0 CAPLUS

CN Benzoic acid, 4-[[[(6-hydroxyhexyl)oxy]imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (E)- (9CI) (CA INDEX NAME)

RN 182205-84-1 CAPLUS

CN Benzoic acid, 4-[[[[(6-ethoxy-6-oxohexy1)oxy]imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propenyl ester, (Z)-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 182205-85-2 CAPLUS

CN Benzoic acid, 4-[[[(6-ethoxy-6-oxohexyl)oxy]imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (Z)- (9CI) (CA INDEX NAME)

RN 182205-86-3 CAPLUS

CN Benzoic acid, 4-[[[(8-hydroxyoctyl)oxy]imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 182205-87-4 CAPLUS

CN Benzoic acid, 4-[[(2E)-[[(8-hydroxyoctyl)oxy]imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (9CI) (CA INDEX NAME)

RN 182205-88-5 CAPLUS

CN Benzoic acid, 4-[[[(7-hydroxyheptyl)oxy]imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 182205-89-6 CAPLUS

CN Benzoic acid, 4-[[(2E)-[[(7-hydroxyheptyl)oxy]imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 182205-90-9 CAPLUS

CN Benzoic acid, 4-[[[[(5-carboxypentyl)oxy]imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (Z)- (9CI) (CA INDEX NAME)

RN 182205-91-0 CAPLUS

CN Benzoic acid, 4-[[[(3-hydroxypropoxy)imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 182205-92-1 CAPLUS

CN Benzoic acid, 4-[[(3-hydroxypropoxy)imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (Z)- (9CI) (CA INDEX NAME)

RN 182205-93-2 CAPLUS

CN Benzoic acid, 4-[[[(4-ethoxy-4-oxobutoxy)imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 182205-94-3 CAPLUS

CN Benzoic acid, 4-[[[(10-hydroxydecyl)oxylimino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$CO_2H$$

NH

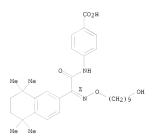
NH

NO

 CO_2H

RN 182205-95-4 CAPLUS

CN Benzoic acid, 4-[[[[(9-hydroxynonyl)oxy]imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (Z)- (9CI) (CA INDEX NAME)



- RN 182205-96-5 CAPLUS
- CN Benzoic acid, 4-[[[(phenylmethoxy)imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (Z)- (9CI) (CA INDEX NAME)

- RN 182205-97-6 CAPLUS
- CN Benzoic acid, 4-[[1-oxo-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)-4,6,9-trioxa-3-azadec-2-en-1-yl]amino]-, (Z)- (9CI) (CA INDEX NAME)

RN 182205-98-7 CAPLUS

CN Benzoic acid, 4-[[[(4-ethoxy-4-oxobutoxy)imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propenyl ester, (2)- (9CI) (CA INDEX NAME)

- OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
- L7 ANSWER 37 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN
- AB By using RAR type (a, B, or y)-specific synthetic retinoids and a pan-retinoic X receptor (RXR)-specific ligand, the authors have investigated the contribution of RARs and RXRs in the activation of RA target genes and the differentiation of embryonal carcinoma cells. The authors demonstrate cell-type- and promoter context-dependent functional redundancies that differ between the three RAR types for mediating the induction of RAR92 and Hoxa-1 in wild-type, RARy-/- and RARa-/- F9 cells and in Pl9 cells. The extent of redundancy between RARs is further modulated by the synergistic activation of RXRs with a pan-RXR agonist. The authors also demonstrate that the expression of RARB2 is auto-inducible in RARY-/- but not in wild-type F9

cells, indicating that the functional redundancies observed between RARs in gene disruption studies can be artifactually generated. Thus, even though all three RARs can functionally substitute each other for inducing the expression of RA target genes and cell differentiation, one RAR can cell-specifically override the activity of the other RARs. Interestingly, only RARy can mediate the retinoic acid-induced differentiation of wild-type F9 cells, whereas the differentiation of P19 cells can be mediated by either RARs or RARy.

ACCESSION NUMBER: 1996:367068 CAPLUS
DOCUMENT NUMBER: 125:104411
ORIGINAL REFERENCE NO.: 125:19259a,19262a

TITLE: Cell-type and promoter-context dependent retinoic acid

receptor (RAR) redundancies for RAR\$\beta\$2 and Hoxa-1 activation in F9 and P19 cells can be artifactually

generated by gene knockouts

AUTHOR(S): Taneja, Reshma; Roy, Bidyut; Plassat, Jean-Luc; Zusi, Chris F.; Ostrowski, Jacek; Reczek, Peter R.; Chambon, Pierre

CORPORATE SOURCE: Inst. Genet. Biol. Mol. Cell., Univ. Louis Pasteur,

Illkirch, 67404, Fr.

SOURCE: Proceedings of the National Academy of Sciences of the

United States of America (1996), 93(12), 6197-6202

CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences

DOCUMENT TYPE: Journal LANGUAGE: English

IT 185629-22-5, BMS 961

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(retinoic acid receptor (RAR) redundancies for RARβ2 and Hoxa-1 activation by retinoids in embryonal carcinoma cells in relation to differentiation can be artifactually generated by gene knockouts)

RN 185629-22-5 CAPLUS

CN Benzoic acid, 3-fluoro-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 86 THERE ARE 86 CAPLUS RECORDS THAT CITE THIS RECORD (88 CITINGS)

L7 ANSWER 38 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

GI

AB Thirty-five title compds. were prepared, claimed under formula I [Z = CONH, NHCO; Ar = (un)substituted bivalent bridge selected from (un)substituted benzene, pyridine, furan, thiophene, or 1-substituted pyrrole nuclei; R1 = H, Me, CH2OH, OH, formyl, SH, or their derivs.; X = H, alkyl; Y = NH2, CH2OH, formyl, carboxyalkyl, or their derivs.; R2, R3 = H, alkyl, OH, SH, or their derivs.; or R2R3 forms a carbo- or heterocyclic ring; R4 = H, halo, alkyl, OH or derivs.]. The compds. are said to show marked effects on cellular differentiation and proliferation, and are useful for treating a variety of conditions, particularly dermatol. disorders (no data). For example, naphthaldehyde derivative II (R = CHO) was treated with NaCN and (NH4)2CO3 to give 87% imidazolinedione derivative II (R = Q), which was hydrolyzed with NaOH to give 64% glycine derivative II [R = CH(NH2)CO2H]. This underwent a sequence of protection as the N-BOC derivative (82%), amidation of the acid function with benzyl 4-aminobenzoate using DCC and DMAP (64%), removal of the BOC group with Me3SiI (99%), and ester hydrolysis with NaOH in MeOH-THF (83%), to give title compound III. Syntheses of all 35 I, four oral formulations of I, and six topical formulations are described.

ACCESSION NUMBER: 1995:731782 CAPLUS
DOCUMENT NUMBER: 123:111685
ORIGINAL REFERENCE NO.: 123:19944h,19945a

ORIGINAL REFERENCE NO.: 123:199444n,19945a
TITLE: New bi-aromatic compounds derived from amides,

pharmaceutical compositions and cosmetic compositions

containing them, and their use. Bernardon, Jean-Michel

PATENT ASSIGNEE(S): Centre International de Recherches Dermatologiques

Galderma, (CIRD GALDERMA), Fr. Eur. Pat. Appl., 27 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

SOURCE:

Me Me

NH₂

PATENT NO. KIND DATE APPLICATION NO. EP 661260 A1 19950705 EP 1994-402551 19941110 EP 661260 B1 19970312 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE FR 2713637 19950616 FR 1993-15066 A1 19931215 FR 2713637 B1 19960105 AT 150007 T 19970315 AT 1994-402551 19941110

ES 2103116	6 T3	19970816	ES	1994-402551		19941110
AU 9478962	2 A	19950629	AU	1994-78962		19941122
AU 669456	B2	19960606				
CA 213789	7 A1	19950616	CA	1994-2137897		19941212
JP 0802708	85 A	19960130	JP	1994-309324		19941213
US 570986	7 A	19980120	US	1994-356680		19941215
US 6051243	3 A	20000418	US	1997-969762		19971113
PRIORITY APPLN	. INFO.:		FR	1993-15066	A	19931215
			US	1994-356680	A3	19941215

OTHER SOURCE(S): IT 166182-57-6

166182-57-6P	166182-58-7P	166182-59-8P
166182-60-1P	166182-61-2P	166182-65-6P
166182-71-4P	166182-72-5P	166182-80-5P
166182-81-6P	166182-82-7P	166182-83-8P
166182-84-9P	166182-85-0P	166182-86-1P
166182-87-2P	166182-88-3P	166182-96-3P
166182-97-4P	166182-99-6P	166183-00-2P
166183-01-3P	166183-03-5P	

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(intermediate; preparation of new bi-aromatic amide derivs. as pharmaceuticals

MADDAT 122.111605

and cosmetics)

RN 166182-57-6 CAPLUS

CN Benzoic acid, 4-[[2-[[(1,1-dimethylethoxy)carbonyl]amino]-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, phenylmethyl ester (CA INDEX NAME)

RN 166182-58-7 CAPLUS

CN Benzoic acid, 4-[[2-amino-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, phenylmethyl ester (CA INDEX NAME)

RN 166182-59-8 CAPLUS

CN Benzoic acid, 4-[[2-(methoxyimino]-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethy1-2-naphthaleny1)acety1]amino]-, 2-propen-1-y1 ester (CA INDEX NAME)

- RN 166182-60-1 CAPLUS
- CN Benzoic acid, 4-[[2-(acetylamino)-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, phenylmethyl ester (CA INDEX NAME)

- RN 166182-61-2 CAPLUS
- CN Benzoic acid, 4-[[2-(hydroxyimino)-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethy1-2-naphthaleny1)acety1]amino]-, 2-propen-1-y1 ester (CA INDEX NAME)

- RN 166182-65-6 CAPLUS
- CN 2-Naphthaleneacetic acid, 5,6,7,8-tetrahydro-5,5,8,8-tetramethyl- α [[4-[(2-propen-1-yloxy)carbonyl]phenyl]amino]carbonyl]-, methyl ester
 (CA INDEX NAME)

- RN 166182-71-4 CAPLUS
- CN Benzoic acid, 4-[[3-amino-1,3-dioxo-2-(5,6,7,8-tetrahydro-5,5,8,8-

tetramethyl-2-naphthalenyl)propyl]amino]-, 2-propen-1-yl ester (CA INDEX NAME)

- RN 166182-72-5 CAPLUS
- CN Benzoic acid, 4-[[2-[[(1,1-dimethylethoxy)carbonyl]amino]-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-2-hydroxy-,2-propen-1-yl ester (CA INDEX NAME)

- RN 166182-80-5 CAPLUS
- CN Benzoic acid, 4-[[(propoxyimino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propenyl ester, (Z)- (9CI) (CA INDEX NAME)

- RN 166182-81-6 CAPLUS
- CN Benzoic acid, 4-[[(propoxyimino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propenyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 166182-82-7 CAPLUS

CN Benzoic acid, 4-[[[(hexyloxy)imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propenyl ester, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 166182-83-8 CAPLUS

CN Benzoic acid, 4-[[[(hexyloxy)imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propenyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 166182-84-9 CAPLUS

CN Benzoic acid, 4-[[[(heptyloxy)imino](5,6,7,8-tetrahydro-5,5,8,8-

tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propenyl ester, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

- RN 166182-85-0 CAPLUS
- CN Benzoic acid, 4-[[[(heptyloxy)imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propenyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

- RN 166182-86-1 CAPLUS
- CN Benzoic acid, 4-[[[(nonyloxy)imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propenyl ester, (2)- (9CI) (CA INDEX NAME)

RN 166182-87-2 CAPLUS

CN Benzoic acid, 4-[[[(nonyloxy)imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propenyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 166182-88-3 CAPLUS

CN Benzoic acid, 4-[[[(dodecyloxy)imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propenyl ester, (2)- (9CI) (CA INDEX NAME)

RN 166182-96-3 CAPLUS

CN Carbamic acid, [2-[(4-acetylphenyl)amino]-2-oxo-1-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 166182-97-4 CAPLUS

CN Carbamic acid, [2-[(4-methylphenyl)amino]-2-oxo-1-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 166182-99-6 CAPLUS

CN Carbamic acid, [2-[[4-[(acetyloxy)methyl]phenyl]amino]-2-oxo-1-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 166183-00-2 CAPLUS

CN Benzoic acid, 2-hydroxy-4-[[2-oxo-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propen-1-yl ester (CA INDEX NAME)

RN 166183-01-3 CAPLUS

CN Benzoic acid, 2-hydroxy-4-[[2-(hydroxy1mino)-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propen-1-yl ester (CA INDEX NAME)

RN 166183-03-5 CAPLUS

CN Benzoic acid, 4-[[4-ethoxy-1,4-dioxo-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)-2-buten-1-yl]amino]-, 2-propen-1-yl ester (CA INDEX NAME)

IT 166182-19-0P 166182-27-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BCU (Biological use, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USSS (Uses)

RN 166182-19-0 CAPLUS

CN Benzoic acid, 4-[[2-amino-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

RN 166182-27-0 CAPLUS

Me Me

CN Benzoic acid, 4-[[2-[[(1,1-dimethylethoxy)carbonyl]amino]-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-2-hydroxy-(CA INDEX NAME)

166182-20-3P 166182-21-4P 166182-22-5P 166182-23-6P 166182-24-7P 166182-25-8P 166182-26-9P 166182-28-1P 166182-33-8P 166182-34-9P 166182-35-0P 166182-36-1P 166182-37-2P 166182-38-3P 166182-39-4P 166182-40-7P 166182-41-8P 166182-46-3P 166182-47-4P 166182-49-6P 166182-50-9P 166182-51-0P 166182-52-1P 166182-53-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BSU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation): USES (Uses)

(preparation of new bi-aromatic amide derivs. as pharmaceuticals and cosmetics)

RN 166182-20-3 CAPLUS

N Benzoic acid, 4-[[2-(methoxyimino)-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

RN 166182-21-4 CAPLUS

CN Benzoic acid, 4-[[2-(acetylamino)-2-(5,6,7,8-tetrahydro-5,5,8,8tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

RN 166182-22-5 CAPLUS

CN Benzoic acid, 4-[[(hydroxyimino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 166182-23-6 CAPLUS

CN Benzoic acid, 4-[[(2Z)-(hydroxyimino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (9CI) (CA INDEX NAME)

- RN 166182-24-7 CAPLUS
- CN 2-Naphthaleneacetic acid, α-[[(4-carboxyphenyl)amino]carbonyl]-5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-, 2-methyl ester (CA INDEX NAME)

- RN 166182-25-8 CAPLUS
- CN 2-Naphthaleneacetic acid, α -[[(4-carboxyphenyl)amino]carbonyl]-5,6,7,8-tetrahydro-5,5,8,8-tetramethyl- (CA INDEX NAME)

- RN 166182-26-9 CAPLUS
- CN Benzoic acid, 4-[[3-amino-1,3-dioxo-2-(5,6,7,8-tetrahydro-5,5,8,8tetramethyl-2-naphthalenyl)propyl]amino]- (CA INDEX NAME)

RN 166182-28-1 CAPLUS

CN Benzoic acid, 4-[[2-amino-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-2-hydroxy- (CA INDEX NAME)

RN 166182-33-8 CAPLUS

CN Benzoic acid, 4-[(propoxyimino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 166182-34-9 CAPLUS

CN Benzoic acid, 4-[[(propoxyimino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (E)- (9CI) (CA INDEX NAME)

166182-35-0 CAPLUS RN

CN Benzoic acid, 4-[[[(hexyloxy)imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 166182-36-1 CAPLUS

CN Benzoic acid, 4-[[[(hexyloxy)imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 166182-37-2 CAPLUS

CN Benzoic acid, 4-[[[(heptyloxy)imino](5,6,7,8-tetrahydro-5,5,8,8tetramethy1-2-naphthaleny1)acety1]amino]-, (Z)- (9CI) (CA INDEX NAME)

- RN 166182-38-3 CAPLUS
- CN Benzoic acid, 4-[[(heptyloxy)imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

- RN 166182-39-4 CAPLUS
- CN Benzoic acid, 4-[[[(nonyloxy)imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (Z)- (9CI) (CA INDEX NAME)

RN 166182-40-7 CAPLUS

CN Benzoic acid, 4-[[[(nonyloxy)imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 166182-41-8 CAPLUS

CN Benzoic acid, 4-[[[(dodecyloxy)imino](5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 166182-46-3 CAPLUS

CN 2-Naphthaleneacetamide, N-(4-acetylphenyl)- α -amino-5,6,7,8-tetrahydro-5,5,8,8-tetramethyl- (CA INDEX NAME)

RN 166182-47-4 CAPLUS

CN 2-Naphthaleneacetamide, α-amino-5,6,7,8-tetrahydro-5,5,8,8tetramethyl-N-(4-methylphenyl)- (CA INDEX NAME)

RN 166182-49-6 CAPLUS

CN Carbamic acid, [2-[[4-(aminocarbonyl)phenyl]amino]-2-oxo-1-(5,6,7,8-tetrahydxo-5,5,8,8-tetramethyl-2-naphthalenyl)ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 166182-50-9 CAPLUS

CN 2-Naphthaleneacetamide, N-[4-[(acetyloxy)methyl]phenyl]-α-amino-5,6,7,8-tetrahydro-5,5,8,8-tetramethyl- (CA INDEX NAME)

RN 166182-51-0 CAPLUS

CN Benzoic acid, 2-hydroxy-4-[[(hydroxyimino)(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, (Z)- (9CI) (CA INDEX NAME)

- RN 166182-52-1 CAPLUS
 - CN Benzoic acid, 4-[[4-ethoxy-1,4-dioxo-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)-2-buten-1-yl]amino]- (CA INDEX NAME)

- RN 166182-53-2 CAPLUS
- CN Benzoic acid, 4-[[4-(1,1-dimethylethoxy)-1,4-dioxo-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)-2-buten-1-yl]amino]-, 2-propen-1-yl ester (CA INDEX NAME)

Me Me
$$CH-C-OBu-t$$
 $C-C-OHU-t$ $C-C-OHU-CH=CH_2$ $CH=CH_2$

- OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
- L7 ANSWER 39 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

AB Title compds. II; R1 = Me, CH2OH, CHO, CO2H, alkoxycarbonyl, etc.; R2, R3 = OH, alkoxy, alkansyloxy, etc.; R3 may addnl. = H; R4 = H, OH, alkyl, alkoxy, etc.; R5, R7 = H, OH, alkoxy, substituted alkyl, etc.; R6 = H, OH, (cyclo)alkyl, alkoxy, etc.; R5R6, R6R7 = atoms to complete a ring; X = (substituted)-CH2CH2W, -CH2WCH2, -CH2CH2), -CH1CHCH2, etc.; W = O, NH, S00-2, etc.] were prepared as agents affecting cell differentiation and proliferation (no data). Thus, 2, 4+ (H0) 2C6H40C2CH2P was condensed with 2-bromoacetyl-5,6;7,8-tetrahydro-5,5,8,8-tetramethylnaphthalene to give, after reduction, title compound II.

ACCESSION NUMBER: 1993:191364 CAPLUS

DOCUMENT NUMBER: 118:191364 ORIGINAL REFERENCE NO.: 118:32857a

ORIGINAL REFERENCE NO.: 118:32857a,32860a
TITLE: Preparation and formulation of

4-(2-aryl-2-hydroxyethoxy)salicylates and analogs as

drugs
INVENTOR(S): Bernardon, Jean Michel

PATENT ASSIGNEE(S): Centre International de Recherches Dermatologiques

Galderma, (CIRD galderma), Fr.

SOURCE: Eur. Pat. Appl., 31 pp. CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PAT	TENT NO.			KIND		DATE		APE	LICATION NO.		DATE
	514264 514264			A1 B1		19921119 19951115		ΕP	1992-401306		19920513
	R: AT,	BE,	CH,	DE, I	DΚ,	ES, FR,	GB,	GF	R, IT, LI, NL,	PT,	SE
FR	2676439			A1		19921120		FR	1991-5747		19910513
FR	2676439			B1		19941028					
CA	2103044			A1		19921114		CA	1992-2103044		19920513
CA	2103044			С		20010417					
WO	9220643			A1		19921126		WO	1992-FR414		19920513
	W: AU,	CA,	JP,	US							
ΑU	9217688			A		19921230		ΑU	1992-17688		19920513
ΑU	656777			B2		19950216					
ZA	9203470			A		19930428		ZA	1992-3470		19920513
JP	06511475			T		19941222		JΡ	1992-509849		19920513
JΡ	3244271			B2		20020107					
ΑT	130291			T		19951215			1992-401306		19920513
ES	2080457			Т3		19960201		ES	1992-401306		19920513
US	5476860			A		19951219		US	1993-140171		19931208

US 5654331 A 19970805 US 1995-450078 19950525
PRIORITY APPLN. INFO.: FR 1991-5747 A 19910513
W0 1992-FR414 A 19920513
US 1993-140171 A3 19930503

OTHER SOURCE(S): MARPAT 118:191364

IT 142651-09-0
 RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, in preparation of dermatol., ophthalmic, and respiratory drug)

RN 142651-09-0 CAPLUS

CN Benzoic acid, 2-hydroxy-4-[[2-oxo-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl]acetyl]amino]-, methyl ester (CA INDEX NAME)

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

L7 ANSWER 40 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN GI

Me Me

AB Title compds. [I; R = aryl group 0; R1 = H, OH, Me, CH2OH, COZH, alkanoyl, etc.; R2 = H, OH, alkyl, Alkoxy, F. Cl, CF3, CH2OH, etc.; R3, R5 = H, OH, (cyclo) alkyl, alkoxy, etc.; R4 = groups cited for R3, F, Cl, alkylthio, etc.; R3R4 = CMe2(CH2) CMCNe2; X = CH2ONH, COZCH2, O2CO, O2CNH, COCH2O, etc.; Z = O, S, CH:CH, N:CH, etc.; n = 1, 2] were prepared as ophthalmic, dermatol., and respiratory agents, etc. (no data). Thus, 5,6,7,8-tetrahydro-5,5,8-tetrahydro-5,50 acted to Wolff-Kishner reduction to give, after SOC12 treatment, the naphthylacetyl chloride which was condensed with 4-H2NC6H4COZCH2CH:CH2 (preparation given) to give, after (Ch3P) 4Pd/morpholine treatment, title compound II.

ACCESSION NUMBER: 1992:511282 CAPLUS DOCUMENT NUMBER: 117:111282

ORIGINAL REFERENCE NO.: 117:19403a,19406a

TITLE: Preparation and formulation of

(5,6,7,8-tetrahydronaphthylacetamido)benzoates and analogs as drugs

INVENTOR(S): Bernardon, Jean Michel; Pilgrim, William Robert

PATENT ASSIGNEE(S): Centre International de Recherches Dermatologiques Galderma, Fr.

PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.					KIND DATE				APPLICATION NO.							DATE		
	92069	948			A1			0430		WO	199	1-F	R79	3			19911011	
	RW:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GE	R, I	Τ,	LU,	NL,	SE			
AU	91881 64631	720			A		1992	0520		AU	199	1-8	872	0			19911011	
AU	64631	1.4			B2		1994	0217										
ZA	91081	126			A		1992	0624		z_{A}	199	1-8	126				19911011	
EP	55228	32			A1		1993	0728		EΡ	199	1-9	196	25			19911011	
EP	55228	32			B1		1994	0824										
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GE	R, I	Τ,	LI,	NL,	SE			
JP	06502	2408			T		1994	0317		JΡ	199	1-5	181	63			19911011 19911011 19911011	
JP	31970)11			B2		2001	0813										
ES	20604	113			Т3		1994	1116		ES	199	1 - 9	196	25			19911011	
CA	2093	789			C		2002	0101		CA	199	1-2	093	789			19911011	
US	53875	594			A		1995	0207		US	199	2-8	595	22			19920804	
US	54399	925			A		1995	8080		US	199	3-1	671	45			19931216	
US	5567	721			A		1996	1022		US	199	5-4	306	22			19950428	
																	19950428	
US	56681	156			A		1997	0916		US	199	5 - 4	306	13			19950428	
US	56888	317			A		1997	1118		US	199	5 - 4	306	12			19950428 19901012	
IORIT	Y APPI	LN.	INFO	. :						LU	199	0-8	782	1		Α	19901012	
										WO	199	1-F	R79	3		A	19911011	
																	19920804	
										US	199	3-1	671	45		A3	19931216	
HER S	OURCE	(S):			MARI	PAT	117:	1112	82									
14	2650-4	48-43	P	14	2650-	-89-	-3P	1	4265	0-9	90-6	P						
14	2651-0)2-3	P	14	2651-	-07-	-8P	1	4265	1-0	0-90	P						
14	2651-1	10-3	P															

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of drugs) 142650-48-4 CAPLUS

Benzoic acid, 4-[[2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-CN naphthalenyl)acetyl]amino]-, 2-propen-1-yl ester (CA INDEX NAME)

Me Me
$$CH_2-C-NH$$
 $C-O-CH_2-CH$ CH_2

RN

RN

CN Benzoic acid, 4-[[2-oxo-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propen-1-yl ester (CA INDEX NAME)

- RN 142650-90-6 CAPLUS
- CN Benzoic acid, 4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propen-1-yl ester (CA INDEX NAME)

- RN 142651-02-3 CAPLUS
- CN Benzoic acid, 4-[[2-fluoro-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, 2-propen-1-yl ester (CA INDEX NAME)

- RN 142651-07-8 CAPLUS
- CN Benzoic acid, 4-[[1-oxo-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)-2-propen-1-yl]amino]-, methyl ester (CA INDEX NAME)

- RN 142651-09-0 CAPLUS
- CN Benzoic acid, 2-hydroxy-4-[[2-oxo-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, methyl ester (CA INDEX NAME)

- RN 142651-10-3 CAPLUS
- CN Benzoic acid, 2-hydroxy-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]-, methyl ester (CA INDEX NAME)

- IT 139611-80-6P 139611-81-7P 142650-22-4P 142650-36-0P 142650-39-3P 142650-42-8P 142651-08-9P 142651-11-4P
 - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 - (preparation of, as drug)
- RN 139611-80-6 CAPLUS
- CN Benzoic acid, 4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

- RN 139611-81-7 CAPLUS
- CN Benzoic acid, 4-[[2-fluoro-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

- RN 142650-22-4 CAPLUS
- CN Benzoic acid, 4-[[2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethy1-2-naphthaleny1)acety1]amino]- (CA INDEX NAME)

- RN 142650-36-0 CAPLUS
- CN Benzoic acid, 4-[[2-oxo-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

- RN 142650-39-3 CAPLUS
- CN Benzoic acid, 4-[methyl[2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

- RN 142650-42-8 CAPLUS
- CN Benzoic acid, 4-[[1-oxo-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2naphthalenyl)propyl]amino]- (CA INDEX NAME)

- RN 142651-08-9 CAPLUS
- CN Benzoic acid, 4-[[1-oxo-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)-2-propen-1-yl]amino]- (CA INDEX NAME)

RN 142651-11-4 CAPLUS

CN Benzoic acid, 2-hydroxy-4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)acetyl]amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 22 THERE ARE 22 CAPLUS RECORDS THAT CITE THIS

RECORD (28 CITINGS)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 41 OF 41 CAPLUS COPYRIGHT 2009 ACS on STN

 ${\tt AB} \quad {\tt A} \ {\tt topical} \ {\tt preparation} \ {\tt contains} \ {\tt a} \ {\tt mixture} \ {\tt of} \ {\tt retinoids} \ {\tt and} \ {\tt a} \ {\tt sterol} \ {\tt to} \ {\tt inhibit} \ {\tt the}$

biosynthesis of cholesterol. The mixture has a synergistic effect in the treatment of epidermal keratinization disorders, epidermal or epithelial proliferation and sebaceous disorders. A gel contained polyethylene 59.58, EtOH 30, isoPrOH 10, BHT 0.05, retinoic acid 0.01, and 25-hydroxycholesterol 0.05 q.

ACCESSION NUMBER: 1992:158918 CAPLUS
DOCUMENT NUMBER: 116:158918
ORIGINAL REFERENCE NO.: 116:26749a,26752a

TITLE: Topical compositions containing a mixture of a

retinoid and a sterol

INVENTOR(S): Reichert, Uwe; Schmidt, Rainer; Shroot, Braham
PATENT ASSIGNEE(S): Centre International de Recherches Dermatologiques

(CIRD), Fr.
SOURCE: Eur. Pat. Appl., 30 pp.

SOURCE: Eur. Pat. Appl., 30 p

DOCUMENT TYPE: Patent

LANGUAGE: French FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	TENT I	NO.			KINI)	DATE		AF	PL	ICATI	иол	10.		DATE	
						-										
EP	4653	43			A1		1992	0108	E	1	991-4	10180)5		199107	02
EP	4653	43			B1		1994	0615								
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, C	GR,	IT,	LI,	NL,	SE		
FR	26631	850			A1		1992	0103	FI	1	990-8	3344			199007	02
FR	26631	850			B1		1994	0114								
WO	92000	076			A1		1992	0109	WC	1:	991-E	R526	5		199107	02
	W:	AU,	CA,	JP,	US											
AU	91818	836			A		1992	0123	AU	1 1	991-8	31836	5		199107	02

JP 06501458 JP 3224228	T B2	19940217 20011029	JP	1991-513004		19910702
ES 2055972	Т3	19940901	ES	1991-401805		19910702
CA 2086429	C	19990921	CA	1991-2086429		19910702
US 5556844	A	19960917	US	1993-962596		19930302
US 5587367	A	19961224	US	1995-447776		19950523
PRIORITY APPLN. INFO.:			FR	1990-8344	A	19900702
			WO	1991-FR526	A	19910702
			US	1993-962596	A3	19930302

IT 139611-80-6D, mixts, with sterols 139611-81-7D, mixts. with sterols

RL: BIOL (Biological study)

(topical prepns. containing, for skin disease treatment)

RN 139611-80-6 CAPLUS CN

Benzoic acid, 4-[[2-hydroxy-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethy1-2naphthalenyl)acetyl]amino]- (CA INDEX NAME)

139611-81-7 CAPLUS RN

CN Benzoic acid, 4-[[2-fluoro-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2naphthalenyl)acetyl]amino]- (CA INDEX NAME)

OS.CITING REF COUNT: THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

=> d his

(FILE 'HOME' ENTERED AT 18:06:31 ON 20 OCT 2009)

FILE 'CAPLUS' ENTERED AT 18:06:45 ON 20 OCT 2009 L1 1 S US20070129368/PN

FILE 'REGISTRY' ENTERED AT 18:08:02 ON 20 OCT 2009

FILE 'CAPLUS' ENTERED AT 18:08:06 ON 20 OCT 2009

FILE 'REGISTRY' ENTERED AT 18:08:06 ON 20 OCT 2009

FILE 'CAPLUS' ENTERED AT 18:08:14 ON 20 OCT 2009

L2 1 S WO2005058803/PN L3 STRUCTURE UPLOADED

S L3

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FILE 'REGISTRY' ENTERED AT 18:15:03 ON 20 OCT 2009
1.4
              7 S L3
     FILE 'CAPLUS' ENTERED AT 18:15:04 ON 20 OCT 2009
              5 S L4
                S L3
     FILE 'REGISTRY' ENTERED AT 18:15:09 ON 20 OCT 2009
L6
            126 S L3 FULL
     FILE 'CAPLUS' ENTERED AT 18:15:10 ON 20 OCT 2009
             41 S L6 FULL
     FILE 'REGISTRY' ENTERED AT 18:15:39 ON 20 OCT 2009
T.R
              0 S L7 AND PY<=2004
     FILE 'CAPLUS' ENTERED AT 18:17:41 ON 20 OCT 2009
     FILE 'REGISTRY' ENTERED AT 18:18:01 ON 20 OCT 2009
=> s 17 and hdac
            25 HDAC
L9
             0 L7 AND HDAC
=> s hdac
T-10
            25 HDAC
=> s histone deacetylase
          8665 HISTONE
          1340 HISTONES
          8665 HISTONE
                 (HISTONE OR HISTONES)
          3030 DEACETYLASE
            21 DEACETYLASES
          3030 DEACETYLASE
                 (DEACETYLASE OR DEACETYLASES)
           558 HISTONE DEACETYLASE
                 (HISTONE (W) DEACETYLASE)
=> s 111 and compounds
           902 COMPOUNDS
L12
             0 L11 AND COMPOUNDS
=> s 111 and inhibitor
         17489 INHIBITOR
            37 INHIBITORS
         17521 INHIBITOR
                 (INHIBITOR OR INHIBITORS)
L13
             2 L11 AND INHIBITOR
=> d 113 abs ibib hitstr 10
      2 ANSWERS ARE AVAILABLE. SPECIFIED ANSWER NUMBER EXCEEDS ANSWER SET SIZE
The answer numbers requested are not in the answer set.
ENTER ANSWER NUMBER OR RANGE (1):
ENTER ANSWER NUMBER OR RANGE (1):end
=> d 113 abs ibib hitstr 1-
'ABS' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'
'IBIB' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'
'HITSTR' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'
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The following are valid formats: Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number) - RN REG SAM - Index Name, MF, and structure - no RN FIDE - All substance data, except sequence data - FIDE, but only 50 names SQIDE - IDE, plus sequence data SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used SQD - Protein sequence data, includes RN SQD3 - Same as SQD, but 3-letter amino acid codes are used SON - Protein sequence name information, includes RN EPROP - Table of experimental properties PPROP - Table of predicted properties - EPROP, ETAG, PPROP and SPEC PROP Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are: ABS -- Abstract APPS -- Application and Priority Information BIB -- CA Accession Number, plus Bibliographic Data CAN -- CA Accession Number CBIB -- CA Accession Number, plus Bibliographic Data (compressed) IND -- Index Data IPC -- International Patent Classification PATS -- PI, SO STD -- BIB, IPC, and NCL IABS -- ABS, indented, with text labels IBIB -- BIB, indented, with text labels ISTD -- STD format, indented OBIB ----- AN, plus Bibliographic Data (original) OIBIB ----- OBIB, indented with text labels SBIB ----- BIB, no citations SIBIB ----- IBIB, no citations The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available. The MAX format is the same as ALL. The IALL format is the same as ALL with BIB ABS and IND indented. with text labels. For additional information, please consult the following help messages: HELP DFIELDS -- To see a complete list of individual display fields. HELP FORMATS -- To see detailed descriptions of the predefined formats. ENTER DISPLAY FORMAT (IDE):end => d his (FILE 'HOME' ENTERED AT 18:06:31 ON 20 OCT 2009)

FILE 'CAPLUS' ENTERED AT 18:06:45 ON 20 OCT 2009

1 S US20070129368/PN FILE 'REGISTRY' ENTERED AT 18:08:02 ON 20 OCT 2009 FILE 'CAPLUS' ENTERED AT 18:08:06 ON 20 OCT 2009 FILE 'REGISTRY' ENTERED AT 18:08:06 ON 20 OCT 2009 FILE 'CAPLUS' ENTERED AT 18:08:14 ON 20 OCT 2009 L2 1 S WO2005058803/PN L3 STRUCTURE UPLOADED S L3 FILE 'REGISTRY' ENTERED AT 18:15:03 ON 20 OCT 2009 T. 4 7 S L3 FILE 'CAPLUS' ENTERED AT 18:15:04 ON 20 OCT 2009 L5 5 S L4 S L3 FILE 'REGISTRY' ENTERED AT 18:15:09 ON 20 OCT 2009 1.6 126 S L3 FULL FILE 'CAPLUS' ENTERED AT 18:15:10 ON 20 OCT 2009 41 S L6 FULL FILE 'REGISTRY' ENTERED AT 18:15:39 ON 20 OCT 2009 L8 0 S L7 AND PY<=2004 FILE 'CAPLUS' ENTERED AT 18:17:41 ON 20 OCT 2009 FILE 'REGISTRY' ENTERED AT 18:18:01 ON 20 OCT 2009 L9 0 S L7 AND HDAC L10 25 S HDAC L11 558 S HISTONE DEACETYLASE L12 0 S L11 AND COMPOUNDS L13 2 S L11 AND INHIBITOR => d 113 abs ibib hitstr 1-'ABS' IS NOT A VALID FORMAT FOR FILE 'REGISTRY' 'IBIB' IS NOT A VALID FORMAT FOR FILE 'REGISTRY' 'HITSTR' IS NOT A VALID FORMAT FOR FILE 'REGISTRY' The following are valid formats: Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number) REG RN SAM - Index Name, MF, and structure - no RN FIDE - All substance data, except sequence data - FIDE, but only 50 names SQIDE - IDE, plus sequence data SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used SOD - Protein sequence data, includes RN SQD3 - Same as SQD, but 3-letter amino acid codes are used SON - Protein sequence name information, includes RN EPROP - Table of experimental properties

PPROP - Table of predicted properties

- EPROP, ETAG, PPROP and SPEC

PROP

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are: ABS -- Abstract APPS -- Application and Priority Information BIB -- CA Accession Number, plus Bibliographic Data CAN -- CA Accession Number CBIB -- CA Accession Number, plus Bibliographic Data (compressed) IND -- Index Data IPC -- International Patent Classification PATS -- PI, SO STD -- BIB, IPC, and NCL IABS -- ABS, indented, with text labels IBIB -- BIB, indented, with text labels ISTD -- STD format, indented OBIB ----- AN, plus Bibliographic Data (original) OIBIB ----- OBIB, indented with text labels SBIB ----- BIB, no citations SIBIB ----- IBIB, no citations The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available. The MAX format is the same as ALL. The IALL format is the same as ALL with BIB ABS and IND indented. with text labels. For additional information, please consult the following help messages: HELP DFIELDS -- To see a complete list of individual display fields. HELP FORMATS -- To see detailed descriptions of the predefined formats. ENTER DISPLAY FORMAT (IDE):end => d his (FILE 'HOME' ENTERED AT 18:06:31 ON 20 OCT 2009) FILE 'CAPLUS' ENTERED AT 18:06:45 ON 20 OCT 2009 L1 1 S US20070129368/PN FILE 'REGISTRY' ENTERED AT 18:08:02 ON 20 OCT 2009 FILE 'CAPLUS' ENTERED AT 18:08:06 ON 20 OCT 2009 FILE 'REGISTRY' ENTERED AT 18:08:06 ON 20 OCT 2009 FILE 'CAPLUS' ENTERED AT 18:08:14 ON 20 OCT 2009 1 S WO2005058803/PN STRUCTURE UPLOADED S L3 FILE 'REGISTRY' ENTERED AT 18:15:03 ON 20 OCT 2009 T. 4 FILE 'CAPLUS' ENTERED AT 18:15:04 ON 20 OCT 2009 5 S L4

S L3

FILE 'REGISTRY' ENTERED AT 18:15:09 ON 20 OCT 2009 1.6 126 S L3 FULL FILE 'CAPLUS' ENTERED AT 18:15:10 ON 20 OCT 2009 L7 41 S L6 FULL FILE 'REGISTRY' ENTERED AT 18:15:39 ON 20 OCT 2009 0 S L7 AND PY<=2004 L8 FILE 'CAPLUS' ENTERED AT 18:17:41 ON 20 OCT 2009 FILE 'REGISTRY' ENTERED AT 18:18:01 ON 20 OCT 2009 0 S L7 AND HDAC

1.9 L10 25 S HDAC

L11 558 S HISTONE DEACETYLASE L12 0 S L11 AND COMPOUNDS L13 2 S L11 AND INHIBITOR

=> file caplus COST IN U.S. DOLLARS

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CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s hdac

3444 HDAC 1266 HDACS

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L14 3840 HDAC
                 (HDAC OR HDACS)
=> s histone deacetylase
         42210 HISTONE
         30807 HISTONES
         48712 HISTONE
                 (HISTONE OR HISTONES)
         10706 DEACETYLASE
         2455 DEACETYLASES
         11304 DEACETYLASE
                 (DEACETYLASE OR DEACETYLASES)
L15
         9278 HISTONE DEACETYLASE
                 (HISTONE (W) DEACETYLASE)
=> s 114 or 115
T.16
         9668 L14 OR L15
=> s 115 and (compound or inhibitor)
        158423 COMPOUND
        970603 COMPOUNDS
       1102423 COMPOUND
                 (COMPOUND OR COMPOUNDS)
        629770 INHIBITOR
        619456 INHIBITORS
        972957 INHIBITOR
                 (INHIBITOR OR INHIBITORS)
          5931 L15 AND (COMPOUND OR INHIBITOR)
=> s 117 and tetrahydro?
        226621 TETRAHYDRO?
           110 L17 AND TETRAHYDRO?
=> d scan 118
T.1.8
     110 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN
ΔN
     2005:516308 BIBLIOGRAPHIC DATA NOT AVAILABLE
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1
T.18
     110 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN
IC
     ICM A61K
CC
     28-8 (Heterocyclic Compounds (More Than One Hetero Atom))
     Section cross-reference(s): 1, 63
TI
     Pyrazole derivatives as protein kinase modulators, their preparation,
     pharmaceutical compositions, and use in therapy
     pyrazole amine prepn protein kinase inhibitor
IT
    Cvtokines
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (-activating agents, codrugs; preparation of pyrazole derivs. as protein
        kinase modulators useful as anticancer agents in combination
        chemotherapy)
     Apoptosis
     Cell differentiation
        (-associated diseases; preparation of pyrazole derivs. as protein kinase
        modulators useful as anticancer agents in combination chemotherapy)
     Antibodies and Immunoglobulins
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
```

(anti-CD20, codrugs; preparation of pyrazole derivs. as protein kinase modulators useful as anticancer agents in combination chemotherapy)

(Biological study); USES (Uses)

```
Antibodies and Immunoglobulins
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (anti-CD22, codrugs; preparation of pyrazole derivs. as protein kinase
        modulators useful as anticancer agents in combination chemotherapy)
     Antibodies and Immunoglobulins
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (anti-CD33, codrugs; preparation of pyrazole derivs. as protein kinase
       modulators useful as anticancer agents in combination chemotherapy)
     Antibodies and Immunoglobulins
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (anti-CD52, codrugs; preparation of pyrazole derivs. as protein kinase
       modulators useful as anticancer agents in combination chemotherapy)
     DNA
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (binders, codrugs; preparation of pyrazole derivs. as protein kinase
        modulators useful as anticancer agents in combination chemotherapy)
     Antibodies and Immunoglobulins
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (chimeric, monoclonal, codrugs; preparation of pyrazole derivs, as protein
        kinase modulators useful as anticancer agents in combination
        chemotherapy)
     Interleukin 2
     Retinoids
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (codrug; preparation of pyrazole derivs. as protein kinase modulators useful
        as anticancer agents in combination chemotherapy)
    Alkylating agents, biological
     Antiandrogens
     Antiestrogens
     Antimetabolites
     Cytotoxic agents
     Hormone antagonists
        (codrugs; preparation of pyrazole derivs. as protein kinase modulators
        useful as anticancer agents in combination chemotherapy)
    Anthracyclines
     Cvtokines
     Hormones, animal
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (codrugs; preparation of pyrazole derivs. as protein kinase modulators
        useful as anticancer agents in combination chemotherapy)
ΙT
    Carcinoma
     Colon neoplasm
        (colon carcinoma; preparation of pyrazole derivs. as protein kinase
        modulators useful as anticancer agents in combination chemotherapy)
     Signal transduction
        (inhibitors, codrugs; preparation of pyrazole derivs, as protein
        kinase modulators useful as anticancer agents in combination
       chemotherapy)
     Antibodies and Immunoglobulins
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (monoclonal, codrugs; preparation of pyrazole derivs. as protein kinase
       modulators useful as anticancer agents in combination chemotherapy)
    Antibodies and Immunoglobulins
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
```

kinase modulators useful as anticancer agents in combination chemotherapy) Antitumor agents Combination chemotherapy Freeze-dried drug delivery systems Human Neoplasm Pharmaceutical capsules Pharmaceutical injections Pharmaceutical tablets Prophylaxis (preparation of pyrazole derivs. as protein kinase modulators useful as anticancer agents in combination chemotherapy) Hormone receptors RL: BSU (Biological study, unclassified); BIOL (Biological study) (preparation of pyrazole derivs. as protein kinase modulators useful as anticancer agents in combination chemotherapy) IT Disease, animal (proliferative; preparation of pyrazole derivs. as protein kinase modulators useful as anticancer agents in combination chemotherapy) Pharmaceutical injections (s.c. injections; preparation of pyrazole derivs. as protein kinase modulators useful as anticancer agents in combination chemotherapy) Alkaloids RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (vinca, codrugs; preparation of pyrazole derivs. as protein kinase modulators useful as anticancer agents in combination chemotherapy) Interferons RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) $(\alpha$, codrug; preparation of pyrazole derivs. as protein kinase modulators useful as anticancer agents in combination chemotherapy) 857531-18-1P, (R)-N-[2-(4-Chlorophenyl)-2-[4-(1H-pyrazol-4yl)phenyl]ethyl]methylamine 857531-19-2P, (S)-N-[2-(4-Chlorophenyl)-2-[4-(1H-pyrazol-4-yl)phenyl]ethyl]methylamine 857531-20-5P, (R)-2-(4-Chlorophenyl)-2-[4-(1H-pyrazol-4v1)phenv1]ethvlamine 857531-21-6P, (S)-2-(4-Chlorophenyl)-2-[4-(1H-pyrazol-4-yl)phenyl]ethylamine RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (chiral drug candidate; preparation of pyrazole derivs. as protein kinase modulators useful as anticancer agents in combination chemotherapy) 50-18-0, Cyclophosphamide 51-21-8, 5-FU 58-05-9, Leucovorin 302-79-4, Tretinoin 1605-68-1, Taxane 15663-27-1, Cisplatin 33069-62-4, Paclitaxel 41575-94-4, Carboplatin 53714-56-0, Leuprorelin 61825-94-3, Oxaliplatin 63612-50-0, Nilutamide 65807-02-5, Goserelin 90357-06-5, Bicalutamide 95058-81-4, Gemcitabine 97682-44-5, Justin 107868-30-4, Exemestane 112809-51-5, Letrozele 114977-28-5, Docetaxel 120511-73-1, Anastrazole 129453-61-8, Fulvestrant 137281-23-3, Pemetrexed 152459-95-5, Imatinib 154361-50-9, Capecitabine 180288-69-1, Trastuzumab 183221-74-6, Erlotinib 184475-35-2, Gefitinib 205923-56-4, Cetuximab 216503-57-0. Alemtuzumab 216974-75-3, Bevacizumab 475207-59-1, Nexavar RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (codrug; preparation of pyrazole derivs. as protein kinase modulators useful as anticancer agents in combination chemotherapy) тт 55-86-7, Nitrogen mustard 151-56-4D, Aziridine, derivs. 7440-06-4D,

(monoclonal, human, codrugs; preparation of pyrazole derivs. as protein

(Biological study); USES (Uses)

```
Platinum, compds.
                   7689-03-4D, Camptothecin, compds. 9034-40-6,
Gonadotropin-releasing hormone 13010-20-3D, Nitrosourea, agents
                       208921-02-2, Tositumomab
174722-31-7, Rituximab
                                                  220578-59-6,
Gemtuzumab ozogamicin
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (codrugs; preparation of pyrazole derivs. as protein kinase modulators
  useful as anticancer agents in combination chemotherapy)
857530-77-9P, 3-Pheny1-2-[3-(1H-pyrazol-4-y1)pheny1]propionitrile
857532-40-2P, 4-(4-Chlorophenv1)-4-(4-(3-methv1-1H-pvrazol-4-
vl)phenvl|piperidine
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); RACT (Reactant or reagent); USES (Uses)
   (drug candidate; preparation of pyrazole derivs. as protein kinase
  modulators useful as anticancer agents in combination chemotherapy)
857530-76-8P, 2-Phenyl-2-[4-(1H-pyrazol-4-yl)phenyl]ethylamine
857530-79-1P, 2-[4-(3,5-Dimethyl-1H-pyrazol-4-yl)phenyl]-2-
phenylethylamine 857530-82-6P, 2-[3-(3,5-Dimethyl-1H-pyrazol-4-
yl)phenyl]-1-phenylethylamine 857530-84-8P,
3-Pheny1-2-[3-(1H-pyrazo1-4-y1)pheny1]propylamine 857530-85-9P,
3-Pheny1-2-[4-(1H-pyrazol-4-yl)phenyl]propylamine 857530-86-0P,
[3-(4-Chlorophenyl)-3-[4-(1H-pyrazol-4-vl)phenyl]propyl]methylamine
857530-91-7P, [3-(3,4-Difluorophenyl)-3-[4-(1H-pyrazol-4-
vl)phenvl|propvl|methvlamine
                             857530-94-0P.
[3-(3-Chlorophenyl)-3-[4-(1H-pyrazol-4-yl)phenyl]propyl]methylamine
857530-95-1P, 3-(4-Chlorophenyl)-3-[4-(1H-pyrazol-4-yl)phenyl]propionamide
857530-96-2P, 3-(4-Chlorophenyl)-3-[4-(1H-pyrazol-4-yl)phenyl]propylamine
857530-99-5P, 3-(3,4-Dichlorophenyl)-3-[4-(1H-pyrazol-4-
v1)phenv11propvlamine 857531-00-1P.
4-(4-Chlorophenyl)-4-[4-(1H-pyrazol-4-yl)phenyl]piperidine 857531-03-4P,
4-(4-Methoxyphenyl)-4-[4-(1H-pyrazol-4-yl)phenyl]piperidine
857531-04-5P, 4-(4-Chlorophenyl)-1-methyl-4-[4-(1H-pyrazol-4-
vl)phenvl|piperidine
                     857531-07-8P,
4-Phenyl-4-[4-(1H-pyrazol-4-yl)phenyl]piperidine
                                                  857531-08-9P,
4-[4-(3,5-Dimethyl-1H-pyrazol-4-yl)phenyl]-4-phenylpiperidine
857531-09-0P, Dimethyl[3-[4-(1H-pyrazol-4-yl)phenyl]-3-pyridin-2-
ylpropyl]amine
               857531-10-3P, [2-(4-Chlorophenyl)-2-[4-(1H-pyrazol-4-
yl)phenyl]ethyl]dimethylamine
                               857531-11-4P,
4-[2-(4-Chlorophenyl)-2-[4-(1H-pyrazol-4-yl)phenyl]ethyl]morpholine
857531-12-5P, 4-[4-[1-(4-Chlorophenv1)-2-pvrrolidin-1-vlethv1]phenv1]-1H-
pyrazole
         857531-13-6P, N-12-(4-Chlorophenyl)-2-14-(1H-pyrazol-4-
vl)phenvllethvllisopropylamine 857531-14-7P.
Dimethyl[2-phenyl-2-[4-(1H-pyrazol-4-yl)phenyl]ethyl]amine
                                                           857531-15-8P.
[2,2-Bis[4-(1H-pyrazol-4-v1)phenyl]ethyl]dimethylamine 857531-16-9P,
[2,2-Bis[4-(1H-pyrazol-4-v1)phenv1]ethv1]methvlamine
                                                      857531-22-7P,
2-(4-Chlorophenyl)-2-[4-(1H-pyrazol-4-yl)phenyl]acetamide
                                                           857531-23-8P,
1-[2-(4-Chlorophenyl)-2-[4-(1H-pyrazol-4-yl)phenyl]ethyl]piperazine
857531-25-0P, 1-[2-(4-Chlorophenyl)-2-[4-(1H-pyrazol-4-
yl)phenyl]ethyl]piperidine
                            857531-26-1P.
4-[4-[2-Azetidin-1-yl-1-(4-chlorophenyl)ethyl]phenyl]-1H-pyrazole
857531-29-4P, 1-Phenyl-2-[4-(1H-pyrazol-4-yl)phenyl]ethylamine
857531-33-0P, [3-(1H-Pvrazol-4-vl)phenvl]acetonitrile
                                                       857531-34-1P,
2-(4-Chlorophenyl)-N-methyl-2-[4-(1H-pyrazol-4-yl)phenyl]acetamide
857531-35-2P, N-Methyl-2,2-bis[4-(1H-pyrazol-4-yl)phenyl]acetamide
857531-37-4P, N-[2-(4-Chlorophenyl)-2-[4-(1H-pyrazol-4-
yl)phenyl]ethyl]ethylamine
                           857531-38-5P,
4-[4-[1-(4-Chlorophenyl)-2-imidazol-1-ylethyl]phenyl]-1H-pyrazole
857531-39-6P, Methy1[2-(4-phenoxypheny1)-2-[4-(1H-pyrazo1-4-
yl)phenyl]ethyl]amine 857531-41-0P,
[2-(4-Methoxyphenyl)-2-[4-(1H-pyrazol-4-yl)phenyl]ethyl]methylamine
857531-45-4P, Methyl[2-[4-(pyrazin-2-yloxy)phenyl]-2-[4-(1H-pyrazol-4-
```

ΙT

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vl)phenyl]ethyl]amine 857531-49-8P.
Methy1 [2-phenoxy-2-[4-(1H-pyrazo1-4-y1)pheny1]ethy1]amine 857531-51-2P,
2-[(4-Chlorophenyl)[4-(1H-pyrazol-4-yl)phenyl]methoxy]ethylamine
857531-54-5P, 4-[4-[1-(4-Chlorophenyl)-3-(pyrrolidin-1-yl)propyl]phenyl]-
1H-pyrazole
             857531-55-6P, 4-[4-[3-Azetidin-1-y1-1-(4-
chlorophenyl)propyl]phenyl]-1H-pyrazole
                                        857531-56-7P.
Methyl[3-naphthalen-2-yl-3-[4-(1H-pyrazol-4-yl)phenyl]propyl]amine
857531-57-8P, Dimethyl 4-13-methylamino-1-14-(1H-pyrazol-4-
v1)phenv1|propv1|phenv1|amine 857531-58-9P,
[3-(4-Fluorophenyl)-3-[4-(1H-pyrazol-4-vl)phenyl]propyl]methylamine
857531-59-0P, 4-14-(4-Chlorophenyl)piperidin-4-yl)phenyl]-1H-pyrazole-3-
carbonitrile
             857531-61-4P, 3-(4-Phenoxyphenyl)-3-[4-(1H-pyrazol-4-
yl)phenyl]propylamine 857531-62-5P,
1-[(4-Chlorophenyl)]4-(1H-pyrazol-4-yl)phenylmethyl]piperazine
857531-63-6P, 1-Methyl-4-[phenyl[4-(1H-pyrazol-4-
yl)phenyl]methyl][1,4]diazepane 857531-64-7P,
[3-(3-Chlorophenoxy)-3-[4-(1H-pyrazol-4-yl)phenyl]propyl]methylamine
857531-66-9P, Methyl[2-phenyl-2-[6-(1H-3-methylpyrazol-4-yl)pyridin-3-
yl]ethyl]amine 857531-70-5P, 4-[4-[1-(4-Chlorophenyl)-3-imidazol-1-
vlpropyl|phenyl|-1H-pyrazole
                             857531-73-8P,
4-[4-(3-Imidazol-1-yl-1-phenoxypropyl)phenyl]-1H-pyrazole 857531-75-0P,
4-[4-[4-(1H-Pyrazol-4-yl)phenyl]piperidin-4-yl]phenol 857531-80-7P,
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857531-81-8P, 4-[4-(2-Methoxyethoxy)phenyl]-4-[4-(1H-pyrazol-4-
vl)phenvl|piperidine
                     857531-85-2P.
4-[4-(3-Methoxypropoxy)phenyl]-4-[4-(1H-pyrazol-4-yl)phenyl]piperidine
857531-87-4P, 3-(3,4-Dichlorophenyl)-3-[4-(1H-pyrazol-4-
v1)phenv1|propionamide 857531-88-5P,
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yl)phenyl]ethyl]phenoxy]isonicotinamide 857531-89-6P,
[2-(4-Chlorophenoxy)-2-[4-(1H-pyrazol-4-yl)phenyl]ethyl]methylamine
857531-90-9P, 3-[2-(4-Chlorophenyl)-2-[4-(1H-pyrazol-4-
vl)phenvl]ethvlamino|propan-1-ol
                                 857531-91-0P,
2-[2-(4-Chlorophenyl)-2-[4-(1H-pyrazol-4-yl)phenyl]ethylaminolethanol
857531-92-1P, N-[2-(4-Chlorophenyl)-2-[4-(1H-pyrazol-4-yl)phenyl]ethyl]-
cyclopropanemethanamine
                        857531-93-2P.
Methyl[2-[4-(1H-pyrazol-4-yl)phenyl]-2-(4-pyridin-3-ylphenyl)ethyl]amine
857531-94-3P, 4-[3-Methylamino-1-[4-(1H-pyrazol-4-yl)phenyl]propyl]phenol
857531-95-4P, 3-(4-Methoxyphenyl)-3-[4-(1H-pyrazol-4-yl)phenyl]propylamine
857531-98-7P, 4-(4-Chlorophenyl)-4-[4-(3-methyl-1H-pyrazol-4-
vl)phenvl|piperidine dihydrochloride
                                     857531-99-8P.
2-(4-Chlorophenyl)-2-(4-(1H-pyrazol-4-yl)phenyl)morpholine 857532-03-7P.
[4-[4-[4-(1H-Pyrazol-4-vl)phenyl]piperidin-4-vl]phenoxylacetic acid
857532-04-8P, [4-[4-[4-(1H-Pyrazol-4-yl)phenyl]piperidin-4-
vl]phenoxy]acetic acid methyl ester
                                     857532-06-0P,
4-[4-[4-(1H-Pyrazol-4-vl)phenyl]piperidin-4-vl]benzonitrile
857532-09-3P, [2-(4-Chlorophenv1)-2-[4-(1H-pvrazol-4-
v1)phenv1]propv1]methvlamine
                             857532-12-8P.
1-(4-Chlorophenyl)-2-methylamino-1-[4-(1H-pyrazol-4-yl)phenyl]ethanol
857532-13-9P, 2-Amino-1-(4-chlorophenyl)-1-[4-(1H-pyrazol-4-
                  857532-16-2P, 4-(3,4-Dichlorophenyl)-4-[4-(1H-pyrazol-
yl)phenyl]ethanol
4-v1)phenvl]piperidine
                       857532-17-3P,
4-(3-Chloro-4-methoxyphenyl)-4-[4-(1H-pyrazol-4-yl)phenyl]piperidine
857532-18-4P, 4-(4-Chloro-3-fluorophenyl)-4-[4-(1H-pyrazol-4-
yl)phenyl]piperidine 857532-21-9P,
4-[4-[4-(1H-Pyrazol-4-yl)phenyl]piperidin-4-yl]benzoic acid
dihydrochloride
                857532-25-3P, 4-[4-(1H-Pyrazol-4-yl)phenyl]-1,2,3,4,5,6-
hexahydro-[4,4']bipyridinyl 857532-27-5P,
3-(3-Chlorophenyl)-3-[4-(1H-pyrazol-4-yl)phenyl]propylamine
857532-28-6P, 2-Methylamino-1-(4-nitrophenyl)-1-[4-(1H-pyrazol-4-
y1)pheny1]ethanol 857532-29-7P, 2-(3-Chloro-4-methoxypheny1)-2-[4-(1H-
pyrazol-4-yl)phenyl]ethylamine 857532-30-0P,
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2-(4-Chlorophenyl)-2-fluoro-2-[4-(1H-pyrazol-4-yl)phenyl]ethylamine
857532-32-2P, 3-(3,4-Dichlorophenyl)-3-[6-(1H-pyrazol-4-yl)pyridin-3-
                857532-33-3P, [2-(3-Chloro-4-methoxyphenyl)-2-[4-(1H-
yl]propylamine
pvrazol-4-vl)phenvl]ethvl]methvlamine 857532-34-4P,
[(4-Chlorophenyl)[4-(1H-pyrazol-4-yl)phenyl]methyl]amine 857532-35-5P,
[2-(4-Chlorophenyl)-2-[4-(3-methyl-1H-pyrazol-4-
yl)phenyl]ethyl]methylamine 857532-38-8P,
[2-(4-Fluorophenyl)-2-[4-(1H-pyrazol-4-yl)phenyl]ethyl]methylamine
857532-39-9P, [2-(3-Chlorophenoxy)-2-[4-(1H-pyrazol-4-
vl)phenvl[ethvl]methvlamine 857532-41-3P,
4-[4-[4-(1H-Pyrazol-4-yl)phenyl]piperidin-4-yl]benzoic acid
857532-42-4P, 2-(4-Chloro-3-fluorophenyl)-2-[4-(1H-pyrazol-4-
yl)phenyl]ethylamine 857532-43-5P,
4-(2-Chloro-3-fluorophenyl)-4-[4-(1H-pyrazol-4-yl)phenyl|piperidine
857532-44-6P, 1-[(3,4-Dichlorophenyl)[4-(1H-pyrazol-4-
yl)phenyl]methyl]piperazine 857532-45-7P,
2-(3,4-Dichlorophenyl)-2-[4-(1H-pyrazol-4-yl)phenyl]ethylamine
857532-46-8P, 4-[4-[2-Azetidin-1-y1-1-(4-chlorophenoxy)ethyl]phenyl]-1H-
pyrazole 857532-47-9P, 3-(3-Chloro-4-methoxyphenyl)-3-[4-(1H-pyrazol-4-
yl)phenyl]propylamine
                      857532-48-0P,
[3-(3-Chloro-4-methoxyphenyl)-3-[4-(1H-pyrazol-4-
vl)phenvl|propvl|methvlamine
                             917872-79-8P,
[4-(5-Methyl-3-trifluoromethyl-1H-pyrazol-4-yl)phenyl)acetonitrile
917872-80-1P, Methyl[2-phenyl-2-[6-(1H-pyrazol-4-v1)pyridin-3-
               917872-81-2P, 1-[Phenyl[4-(1H-pyrazol-4-
vllethvllamine
vl)phenyl]methyl]piperazine
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
   (drug candidate; preparation of pyrazole derivs. as protein kinase
  modulators useful as anticancer agents in combination chemotherapy)
329900-75-6
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (inhibitors, codrug; preparation of pyrazole derivs. as protein
  kinase modulators useful as anticancer agents in combination
  chemotherapy)
9037-42-7, DNA methylase
                        9076-57-7, Histone
deacetylase
            140879-24-9 142008-29-5, Protein kinase A
142805-56-9, Topoisomerase II
                               148640-14-6, Protein kinase B
150428-23-2, Cyclin dependent kinase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
  (inhibitors, codrugs; preparation of pyrazole derivs. as protein
  kinase modulators useful as anticancer agents in combination
  chemotherapy)
5359-38-6P, Bis(4-chlorophenyl)acetic acid methyl ester
                                                        7496-20-0P,
2-(3-Bromophenv1)-3-phenv1-2-propenenitrile
                                            18164-50-6P,
Bis(4-chlorophenvl)acetaldehvde
                                18861-58-0P,
3-(4-Bromophenyl)-2-cyanopropenoic acid ethyl ester
                                                     25574-19-0P.
1-(4-Bromophenyl)-3-chloropropan-1-ol 40587-07-3P,
                                       54646-36-5P, 3-Methoxypropyl
1-(4-Bromophenyl)-2-methylaminoethanol
p-toluenesulfonate 63953-36-6P, 2,2-Bis(4-chlorophenyl)-N,N-
                  90531-02-5P, [2,2-Bis(4-
dimethylacetamide
chlorophenvl)ethvl]dimethvlamine
                                  100865-80-3P,
2.2-Bis(4-chlorophenyl)propionic acid 105901-10-8P.
(4-Bromophenyl) (4-chlorophenyl) methanol
                                        405551-72-6P.
2,2-Bis(4-chlorophenyl)propionic acid methyl ester
                                                    566949-43-7P,
[2-(4-Bromopheny1)-2-hydroxyethy1]methylcarbamic acid tert-buty1 ester
857530-78-0P, 2-(3-Bromophenyl)-3-phenylpropionitrile 857530-83-7P,
2-(3-Bromophenyl)-1-phenylethylamine 857530-87-1P,
3-(4-Bromopheny1)-3-(4-chloropheny1)-2-cyanopropanoic acid ethyl ester
857530-88-2P, 3-(4-Bromophenyl)-3-(4-chlorophenyl)propionic acid
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857530-89-3P, 3-(4-Bromophenyl)-3-(4-chlorophenyl)-N-methylpropionamide
857530-90-6P, \quad [3-(4-Bromopheny1)-3-(4-chloropheny1)propy1] \\ methylamine \\ 857530-92-8P, \quad 3-(4-Bromopheny1)-3-(3,4-difluoropheny1)-N-
                   857530-93-9P.
methylpropionamide
3-(3,4-Difluorophenyl)-N-methyl-3-[4-(1H-pyrazol-4-vl)phenyl)propionamide
857530-97-3P, 3-(4-Bromophenyl)-3-(4-chlorophenyl)propionamide
857530-98-4P, 3-(4-Bromophenyl)-3-(4-chlorophenyl)propylamine
857531-01-2P, 4-(4-Bromophenyl)-4-(4-chlorophenyl)piperidine
857531-02-3P, N-[2-(4-Bromophenv1)-2-(4-methoxyphenv1)ethv1]-N-
methylcarbamate tert-butyl ester 857531-05-6P.
4-(4-Bromophenyl)-4-(4-chlorophenyl)piperidine-1-carboxylic acid ethyl
      857531-06-7P, 4-(4-Bromophenyl)-4-(4-chlorophenyl)-1-
methylpiperidine 857531-24-9P, 4-[2,2-Bis(4-
chlorophenyl)ethyl]piperazine-1-carboxylic acid tert-butyl ester
857531-27-2P, 2-(4-Chlorophenyl)-2-[4-(1H-pyrazol-4-yl)phenyl]ethanol
857531-28-3P, 2-(4-Chlorophenyl)-2-[4-(1H-pyrazol-4-yl)phenyl]acetaldehyde
857531-31-8P, 4-Bromo-5-methyl-1-(tetrahydropyran
-2-y1)-3-trifluoromethyl-1H-pyrazole 857531-32-9P,
4-(4-Bromophenyl)-3-methyl-1H-pyrazole 857531-36-3P,
[2-(4-Bromophenyl)-2-(4-chlorophenyl)ethyl]methylamine 857531-40-9P,
[2-(4-Bromophenyl)-2-(4-methoxyphenyl)ethyl]methylamine hydrochloride
857531-46-5P, 4-[1-(4-Bromophenyl)-2-(methylamino)ethyl]phenol
857531-47-6P, [2-(4-Bromophenyl)-2-(4-hydroxyphenyl)ethyl]methylcarbamic
acid tert-butyl ester 857531-48-7P.
N-[2-(4-Bromophenyl)-2-[4-(pyrazin-2-yloxy)phenyl]ethyl]methylamine
857531-50-1P, [2-(4-Bromophenyl)-2-phenoxyethyl]methylamine
857531-52-3P, 2-[2-[(4-Bromophenyl)(4-chlorophenyl)methoxylethyllisoindole-
1.3-dione
          857531-53-4P, N-[2-[(4-Chlorophenyl)[4-(1H-pyrazol-4-
yl)phenyl]methoxy]ethyl]phthalamic acid
                                        857531-65-8P,
[3-(4-Bromophenyl)-3-(3-chlorophenoxy)propyl]methylamine
                                                          857531-67-0P,
6-(3-Methyl-1-trityl-1H-pyrazol-4-yl)nicotinonitrile 857531-68-1P,
(4-Chlorophenyl)[6-(3-methyl-1-trityl-1H-pyrazol-4-v1)pyridin-3-
yl]methanone 857531-71-6P, 1-(4-Bromophenyl)-3-imidazol-1-ylpropan-1-ol
857531-72-7P, 1-[3-(4-Bromophenyl)-3-(4-chlorophenyl)propyl]-1H-imidazole
857531-74-9P, 1-[3-(4-Bromophenyl)-3-phenoxypropyl]-1H-imidazole
857531-77-2P, [2-(4-Bromophenyl)-2-(4-fluorophenyl)ethyl]carbamic acid
             857531-79-4P, N-[2-(4-Fluorophenv1)-2-[4-(1H-pyrazol-4-
benzvl ester
vl)phenvl]ethvl]carbamic acid benzvl ester
                                            857531-82-9P,
4-(4-Bromophenyl)-4-(4-hydroxyphenyl)piperidine-1-carboxylic acid
tert-butyl ester 857531-83-0P, 4-(4-Bromophenyl)-4-(4-(2-
methoxyethoxy)phenyl]piperidine-1-carboxylic acid tert-butyl ester
857531-84-1P, 4-[4-(2-Methoxyethoxy)phenyl]-4-[4-(1H-pyrazol-4-
v1)phenv1|piperidine-1-carboxv1ic acid tert-butv1 ester 857531-86-3P,
4-(4-Bromophenyl)-4-[4-(3-methoxypropoxy)phenyl]piperidine-1-carboxylic
acid tert-butvl ester 857531-96-5P.
4-(4-Chlorophenvl)-4-(4-(3-methyl-1-trityl-1H-pyrazol-4-
vl)phenvl|piperidine
                     857532-00-4P.
2-(4-Chlorophenyl)-2-(4-iodophenyl)oxirane 857532-01-5P,
1-(4-Chlorophenyl)-2-(2-hydroxyethylamino)-1-(4-iodophenyl)ethanol
857532-02-6P, 2-(4-Chlorophenvl)-2-(4-iodophenvl)morpholine
857532-05-9P, [4-[4-(4-Bromophenyl)piperidin-4-yl]phenoxy]acetic acid
ethyl ester hydrochloride
                          857532-07-1P.
4-(4-Chlorophenyl)-4-(4-iodophenyl)piperidine 857532-08-2P,
4-[4-(4-Chlorophenyl)piperidin-4-yl]benzonitrile 857532-10-6P,
2,2-Bis(4-chlorophenyl)-N-methylpropionamide 857532-11-7P,
[2,2-Bis(4-chlorophenyl)propyl]methylamine 857532-14-0P,
2-[2-(4-Chlorophenyl)-2-hydroxy-2-(4-iodophenyl)ethyl]isoindole-1,3-dione
857532-15-1P, N-[2-(4-Chloropheny1)-2-hydroxy-2-[4-(1H-pyrazo1-4-
yl)phenyl]ethyl]phthalamic acid 857532-19-5P,
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4-(4-Chloro-3-fluorophenyl)-4-hydroxypiperidine-1-carboxylic acid
tert-butyl ester 857532-20-8P, 4-(4-Bromophenyl)-4-(4-chloro-3-
fluorophenyl)piperidine hydrochloride 857532-22-0P,
4-(4-Carboxyphenyl)-4-(4-chlorophenyl)piperidine-1-carboxylic acid
tert-butyl ester 857532-23-1P, 4-(4-Bromophenyl)-4-(4-
chlorophenyl)piperidine-1-carboxylic acid tert-butyl ester 857532-24-2P,
4-(4-Carboxyphenyl)-4-[4-(1H-pyrazol-4-yl)phenyl]piperidine-1-carboxylic
acid tert-butyl ester 857532-26-4P, 4-(4-Chlorophenyl)-3,4,5,6-
tetrahydro-2H-[4,4']bipyridinyl-1-carboxylic acid tert-butyl ester
857532-31-1P, 2,2-Bis(4-chlorophenvl)-2-fluoroethylamine 857532-36-6P,
2-(4-Chlorophenyl)-N-methyl-2-[4-(3-methyl-1-trityl-1H-pyrazol-4-
yl)phenyl]acetamide 857532-37-7P.
2-(4-Chlorophenyl)-N-methyl-2-[4-(3-methyl-1H-pyrazol-4-
vl)phenvl]acetamide
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
   (intermediate; preparation of pyrazole derivs. as protein kinase modulators
   useful as anticancer agents in combination chemotherapy)
21771-88-0 39512-49-7, 4-(4-Chlorophenyl)piperidin-4-ol
                                                            568565-46-8
1153819-03-4
RL: RCT (Reactant); RACT (Reactant or reagent)
   (preparation of pyrazole derivs, as protein kinase modulators useful as
   anticancer agents in combination chemotherapy)
857531-76-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
   (preparation of pyrazole derivs. as protein kinase modulators useful as
   anticancer agents in combination chemotherapy)
857531-17-0P, [2-(4-Chlorophenyl)-2-[4-(1H-pyrazol-4-
vl)phenvl]ethvl]methvlamine
RL: PAC (Pharmacological activity); PRP (Properties); RCT (Reactant); SPN
(Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);
PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
   (racemic drug candidate; preparation of pyrazole derivs. as protein kinase
   modulators useful as anticancer agents in combination chemotherapy)
857530-81-5P, 2-(4-Chlorophenyl)-2-[4-(1H-pyrazol-4-yl)phenyl]ethylamine
RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic
preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)
   (racemic drug candidate; preparation of pyrazole derivs. as protein kinase
   modulators useful as anticancer agents in combination chemotherapy)
83-05-6, Bis(4-chlorophenyl)acetic acid 95-50-1, 1,2-Dichlorobenzene
100-47-0, Benzonitrile, reactions 100-51-6, Benzyl alcohol, reactions
100-52-7, Benzaldehyde, reactions 100-66-3, Anisole, reactions
101-84-8, Diphenyl ether 105-56-6, Ethyl cyanoacetate 106-48-9,
4-Chlorophenol
                108-43-0, 3-Chlorophenol 108-86-1, Bromobenzene,
reactions 108-90-7, Chlorobenzene, reactions 108-95-2, Phenol,
          110-89-4, Piperidine, reactions 110-91-8, Morpholine,
reactions
           123-75-1, Pyrrolidine, reactions 156-87-6,
reactions
3-Aminopropan-1-ol 288-32-4, Imidazole, reactions 352-13-6,
4-Fluorophenylmagnesium bromide 503-29-7, Azetidine 541-41-3, Ethyl
chloroformate 591-50-4, Iodobenzene 766-51-8, 2-Chloroanisole
873-77-8, 4-Chlorophenylmagnesium bromide 980-71-2, Brompheniramine maleate 1074-82-4, Potassium phthalimide 1122-91-4,
4-Bromobenzaldehyde 1589-49-7, 3-Methoxypropanol 1982-36-1,
1-((4-Chlorophenyl)(phenyl)methyl)-4-methyl-1,4-diazacycloheptane
dihydrochloride 2516-47-4, Cyclopropylmethylamine 2555-49-9, Ethyl phenoxyacetate 2642-82-2, 2,2-Bis(4-chlorophenyl)ethanol 3891-07-4,
N-(2-Hydroxyethyl)phthalimide 4409-11-4, 4-(4-Chlorobenzyl)pyridine
6186-22-7, 4-Bromophenylacetone 6316-74-1,
2,2-Bis(4-chlorophenyl)-N-methylacetamide 6482-24-2, 2-Bromoethyl methyl
ether 7353-91-5, 4-(N,N-Dimethyl)anilinemagnesium bromide 13139-86-1,
4-Anisylmagnesium bromide 14508-49-7, 2-Chloropyrazine 16532-79-9,
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4-Bromophenylacetonitrile
                                21473-01-8, 2-Naphthylmagnesium bromide
    21473-02-9, 4-Phenoxyphenylmagnesium bromide
                                                   21998-50-5,
    2-(4-Chlorophenyl)-2-phenylethylamine hydrochloride
                                                          27469-61-0,
    1-(Bis(4-chlorophenvl)methvl)piperazine
                                             31736-73-9,
    1-(4-Bromophenv1)-3-chloropropan-1-one 31938-07-5.
    3-Bromophenvlacetonitrile
                                32017-76-8, 2-(4-Bromophenyl)oxirane
    33252-28-7, 6-Chloronicotinonitrile
                                         33252-30-1, 2-Chloro-4-cyanopyridine
    36229-42-2, 3-Chlorophenylmagnesium bromide
                                                  40292-15-7,
    (4-Bromophenvl)(4-nitrophenvl)methanone 41147-82-4,
    2-Amino-1-(4-bromophenyl)ethanol 57260-71-6, N-BOCpiperazine
    57988-58-6, 4-(4-Bromophenyl)piperidin-4-ol
    2-Amino-1,1-bis(4-chlorophenyl)ethanol 60061-68-9,
    4-Bromo-5-methyl-3-trifluoromethyl-1H-pyrazole 79099-07-3,
     4-Oxopiperidine-1-carboxylic acid tert-butyl ester
                                                        79175-35-2,
    3,4-Dichlorophenylmagnesium bromide
                                         85336-82-9,
                                       90897-92-0,
    2,2-Bis(4-chlorophenyl)ethylamine
    3,4-Difluorophenylmagnesium bromide 91983-26-5,
     4-(Cyanomethylphenyl)boronic acid 92206-72-9, 4-Bromobenzylmagnesium
    bromide 99847-42-4, (4-Chlorophenyl)(4-iodophenyl)methanone
    107549-22-4, 3-Bromobenzylmagnesium bromide
                                                 118753-70-1,
    Bis(2-chloroethyl)carbamic acid tert-butyl ester 170793-00-7,
    3-Fluoro-4-chlorophenvlmagnesium bromide
                                              246148-31-2,
     4-(4-Chlorophenvl)-4-phenvlpiperidine 269410-08-4,
     4-(4,4,5,5-Tetramethyl-1,3,2-dioxaborolan-2-yl)-1H-pyrazole
                                                                 288246-16-2.
     4-Bromo-1H-pyrazole-3-carbonitrile 312501-30-7,
     4-[4-(4-Bromophenyl)piperidin-4-yl]phenol
                                                329214-79-1.
    3-(4,4,5,5-Tetramethyl-[1,3,2]dioxaborolan-2-yl)pyridine
                                                               474706-57-5
    857530-80-4, 3,5-Dimethyl-4-(4,4,5,5-tetramethyl-[1,3,2]dioxaborolan-2-yl)-
    1H-pyrazole
                  857531-60-3, 4-(4-Chlorophenyl)-4-[4-(4,4,5,5-tetramethyl-
     [1,3,2]dioxaborolan-2-yl)phenyl]piperidine
                                                857531-97-6.
     4-(4-Bromophenyl)-4-(4-chlorophenyl)piperidine hydrochloride
    RL: RCT (Reactant); RACT (Reactant or reagent)
       (starting material; preparation of pyrazole derivs. as protein kinase
       modulators useful as anticancer agents in combination chemotherapy)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end
=> d his
     (FILE 'HOME' ENTERED AT 18:06:31 ON 20 OCT 2009)
    FILE 'CAPLUS' ENTERED AT 18:06:45 ON 20 OCT 2009
             1 S US20070129368/PN
    FILE 'REGISTRY' ENTERED AT 18:08:02 ON 20 OCT 2009
    FILE 'CAPLUS' ENTERED AT 18:08:06 ON 20 OCT 2009
    FILE 'REGISTRY' ENTERED AT 18:08:06 ON 20 OCT 2009
    FILE 'CAPLUS' ENTERED AT 18:08:14 ON 20 OCT 2009
             1 S WO2005058803/PN
               STRUCTURE UPLOADED
               S L3
    FILE 'REGISTRY' ENTERED AT 18:15:03 ON 20 OCT 2009
             7 S L3
    FILE 'CAPLUS' ENTERED AT 18:15:04 ON 20 OCT 2009
             5 S L4
               S 1.3
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T. 1

L3

1.4

1.5

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FILE 'REGISTRY' ENTERED AT 18:15:09 ON 20 OCT 2009
1.6
            126 S L3 FULL
    FILE 'CAPLUS' ENTERED AT 18:15:10 ON 20 OCT 2009
             41 S L6 FULL
     FILE 'REGISTRY' ENTERED AT 18:15:39 ON 20 OCT 2009
L8
              0 S L7 AND PY<=2004
     FILE 'CAPLUS' ENTERED AT 18:17:41 ON 20 OCT 2009
     FILE 'REGISTRY' ENTERED AT 18:18:01 ON 20 OCT 2009
L9
             0 S L7 AND HDAC
L10
             25 S HDAC
L11
           558 S HISTONE DEACETYLASE
L12
             0 S L11 AND COMPOUNDS
L13
             2 S L11 AND INHIBITOR
     FILE 'CAPLUS' ENTERED AT 18:24:38 ON 20 OCT 2009
L14
           3840 S HDAC
L15
          9278 S HISTONE DEACETYLASE
L16
          9668 S L14 OR L15
L17
          5931 S L15 AND (COMPOUND OR INHIBITOR)
           110 S L17 AND TETRAHYDRO?
L18
=> s 118 and py<=2003
     24038560 PY<=2003
            17 L18 AND PY<=2003
=> s 118 and py<=2004
     25144169 PY<=2004
           26 L18 AND PY<=2004
=> d 120 abs ibib hitstr 1-
YOU HAVE REQUESTED DATA FROM 26 ANSWERS - CONTINUE? Y/(N):v
L20 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
AB
    There is increasing evidence that administration of histone
     deacetylase (HDAC) inhibitors can exert neuroprotective
     effects by a variety of mechanisms. Phenylbutyrate is a well-known HDAC
     inhibitor, which increases gene transcription of a number of genes,
     and also exerts neuroprotective effects. These include several
    antioxidant enzymes, chaperones, and genes involved in cell survival. We
     examined whether administration of phenylbutyrate could exert significant
     neuroprotective effects against 1-methyl-4-phenyl-1,2,3,6-
     tetrahydropyridine (MPTP), which has been used to model
    Parkinson's disease. Administration of phenylbutyrate significantly
    attenuated MPTP-induced depletion of striatal dopamine and loss of
     tyrosine hydroxylase-pos. neurons in the substantia nigra. These findings
     provide further evidence that administration of phenylbutyrate may be a
     useful approach for the treatment of neurodegenerative diseases.
ACCESSION NUMBER:
                         2005:82680 CAPLUS
DOCUMENT NUMBER:
                         142:291263
TITLE:
                         Neuroprotective effects of phenylbutyrate against MPTP
                         neurotoxicity
AUTHOR(S):
                         Gardian, Gabriella; Yang, Lichuan; Cleren, Carine;
                         Calingasan, Noel Y.; Klivenyi, Peter; Beal, M. Flint
CORPORATE SOURCE:
                        Department of Neurology and Neuroscience, New
                         York-Presbyterian Hospital, Weill Medical College of
                        Cornell University, New York, NY, 10021, USA
SOURCE .
                        NeuroMolecular Medicine (2004), 5(3),
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LANGUAGE: English

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26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 2 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN GI

Title compds. represented by the formula I & II [wherein fused ring A is AB optionally substituted; R1 = (alky1)-Xm-(alky1)-Z; X = (un)substituted Ph or heteroaryl; Z = CONH(OH), N(OH)COY; Y = H, (cyclo)alkyl, Ph, heterocyclyl; m = 0 or 1; R4-R5 = H, R2-R3 = independently H, (un) substituted (alkyl) carbocyclic or (alkyl) heterocyclic group; R2R4, R3R5 = independently (un)substituted carbocyclic or heterocyclic ring; R6 = H or alkyl; and their salts, hydrates or solvates thereof] were prepared as histone deacetylase (HDAC) enzyme inhibitors. For example, III was given in a multi-step synthesis starting from the reaction of Me 8-chloro-8-oxooctanoate with chlorotrityl-O-NH2 resin. Most prepared compds. showed inhibition of HDAC and Hela nuclear exts. HDACs with IC50 values of less than 1000 nM. Thus, I & II and their pharmaceutical compns. are useful as HDAC enzyme

inhibitors for the treatment of inter alia and cancers (no data).

ACCESSION NUMBER: 2004:1154709 CAPLUS

DOCUMENT NUMBER: 142:93688

TITLE: Preparation of carboline and beta-carboline

derivatives as HDAC enzyme inhibitors

INVENTOR(S): Davidson, Alan Hornsby; Yarnold, Christopher John; Charleton, Michael Hugh

CODEN: PIXXD2

PATENT ASSIGNEE(S): Chroma Therapeutics Limited, UK

SOURCE: PCT Int. Appl., 39 pp.

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2004113336	A1 20041229	WO 2004-GB2504	20040615 <
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BW, BY,	BZ, CA, CH,

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CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
              NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
              TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
              AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
              EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
              SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE,
              SN, TD, TG
     EP 1633751
                           A1
                                  20060315
                                              EP 2004-736846
                                                                       20040615
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
                          A1 20061019
     US 20060235012
                                               US 2006-559626
                                                                        20060607
PRIORITY APPLN. INFO .:
                                               GB 2003-13814
                                                                   A 20030616
                                               GB 2003-29998
                                                                   A 20031223
                                               WO 2004-GB2504
                                                                   W 20040615
OTHER SOURCE(S):
                          MARPAT 142:93688
OS.CITING REF COUNT:
                          4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
                                 (4 CITINGS)
                                 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                                 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L20 ANSWER 3 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
    Compds. R1R2CH-C6H4-L-COR3 (R1 = lower alkyl optionally substituted with
     one or more suitable substituent(s), aryl optionally substituted with one
     or more suitable substituent(s), fused ring; R2 = acylamino, optionally
     protected OH; L = lower alkenylene; R3 = hydroxyamino), or salts thereof,
     are disclosed. The compds. are useful as inhibitors of
     histone deacetylase and may be used to treat a variety
     of diseases, e.g., inflammatory disorders, diabetes, cirrhosis, acute
     promyelocytic leukemia, protozoal infections, etc. Thus, over 100 compds.
     were synthesized and 4 were shown to inhibit histone
     deacetylase and to inhibit T cell growth.
                         2004:698117 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                          141:202277
TITLE:
                          Dialkylbenzene hydroxylamide histone
                          deacetylase inhibitors for use in
                          therapeutics
                          Urano, Yasuharu; Hosaka, Mitsuru; Kamijo, Kazunori
INVENTOR(S):
                         Fujisawa Pharmaceutical Co., Ltd., Japan
PATENT ASSIGNEE(S):
                          PCT Int. Appl., 75 pp.
SOURCE:
                          CODEN: PIXXD2
DOCUMENT TYPE:
                          Patent.
LANGUAGE:
                          English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                    KIND DATE APPLICATION NO. DATE
     PATENT NO.
                          ----
                                  -----
         2004071401 A2 20040826 W0 2004-JP1437 20040210
20041014 A3 20041014
W: AE, AG, AL, AM, AI, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
     WO 2004071401
                                                                       20040210 <--
     WO 2004071401
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MM, MX, MX, NA, NA, NI
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
              BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
             MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
              GQ, GW, ML, MR, NE, SN, TD, TG
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MARPAT 141:202277

AU 2003-900587 A 20030211

PRIORITY APPLN. INFO.:

OTHER SOURCE(S):

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

(4 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 4 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

Ι

This invention pertains to title N-hydroxybenzamides CvOlJO2CONHOH [I; wherein J = independently OCO, CO2, CO; Cy = independently (un) substituted carbocyclyl, heterocyclyl, aryl; Q1 = independently (un) substituted divalent bidentate group; Q2 = independently (un) substituted alkylene(arylene), arylene(alkylene), alkylene-arylene-alkylene; and pharmaceutically acceptable salts, solvates, amides, esters, ethers, chemical protected forms, and prodrugs thereof], which were prepared as histone deacetylase (HDAC) inhibitors. The present invention also pertains to pharmaceutical compns. of I, the use of such compds. and compns. to inhibit HDAC, and the treatment of conditions mediated by HDAC, such as cancer, proliferative conditions, psoriasis, etc. (no clin. data). For example, N-(benzyloxy)-4-hydroxybenzamide was coupled with 1-(4-methoxyphenyl)cyclohexanecarbonyl chloride in THF to give the ester (52%). Deprotection using 5% Pd/C in MeOH provided II (PX118478) in 64% vield. The latter inhibited HDAC in human cervical adenocarcinoma (HeLa) cells with IC50 of 32 nM and demonstrated antiproliferative activity against HeLa cells, HPV E7 transformed human keratinocyte (K11) cells, and human T-cells (JURKAT) with IC50 values of 4.6 μM, 13.6 μM, and 500 nM, resp.

ACCESSION NUMBER: 2004:633904 CAPLUS

DOCUMENT NUMBER: 141:173976

TITLE: Preparation of [(hydroxyamino)carbonyl]phenyl

cyclohexanecarboxylates as HDAC inhibitors
INVENTOR(S): Finn, Paul W.; Kalvinsh, Ivars; Loza, Einars;

Gutcaits, Aleksandrs; Olutnika, Irena; Serpionova,

Ludmila; Gailite, Vija; Bokaldere, Rasma

PATENT ASSIGNEE(S): Topotarget UK Limited, UK

SOURCE: PCT Int. Appl., 186 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

A1 20040805 WO 2004-GB147 WO 2004065354 20040119 <--W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI AU 2004205372 AU 2004-205372 A1 20040805 20040119 <--CA 2513246 A1 20040805 CA 2004-2513246 20040119 <--EP 1583736 A1 20051012 EP 2004-703207 20040119 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK JP 2006517532 Т 20060727 JP 2006-500216 20040119 US 20060058282 A1 20060316 US 2005-542281 20050715 US 7465719 B2 20081216 PRIORITY APPLN. INFO .: US 2003-440616P P 20030117 WO 2004-GB147 W 20040119

OTHER SOURCE(S): MARPAT 141:173976
OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 5 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN GI

$$\begin{array}{c|c}
R^3 \\
 & L^2 - C - R^2 \\
 & 0
\end{array}$$

AB Title compds. I [Rl = N-containing heterocycle; R2 = hydroxyamino; R3 = H, etc.; L1 = (CH2)n; n = 0-6; L2 = alkenylene] are prepared For instance, 2-(4-iodobenzyl)-HI-benzimidazole (preparation given) is sulfonylated with TsCl, coupled sequentially with acrylic acid (DMF, Pd(OAc)2, (0-tolyl)3P, i-Pt2NEt, 120°, 90 min), O-(tetrahydro

ΙI

-2H-pyran-2-yl)hydroxylamine (DMF, HOBt, EDCI) and deprotected (MeOH, HCl) to give II. II has IC50 = 28 nM for histone deacetylase

. I are useful for the treatment of inflammation and diabetes.

ACCESSION NUMBER: 2004:610126 CAPLUS

DOCUMENT NUMBER: 141:157117

TITLE: Preparation of N-hydroxamide carboxylic acid

derivatives as histone deacetylase

(hdac) inhibitors

INVENTOR(S): Urano, Yasuharu; Satoh, Shigeki; Ishibashi, Naoki;

Kamijo, Kazunori

PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 242 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE -----WO 2004-JP157 WO 2004063169 A1 20040729 20040113 <--W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ US 20040229889 ΑÌ 20041118 US 2004-754541 20040112 <--US 7135493 B2 20061114 CA 2513436 20040729 CA 2004-2513436 A1 20040113 <--EP 1585735 A1 20051019 EP 2004-701698 20040113 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK Т JP 2006-500390 JP 2006518341 20060810 20040113 MX 2005007561 Α 20060208 MX 2005-7561 20050713 IN 2005CN01877 Α 20070330 IN 2005-CN1877 20050809 AU 2003-900116 PRIORITY APPLN. INFO.: A 20030113 AU 2003-905406 20031006 WO 2004-JP157 20040113

OTHER SOURCE(S): OS.CITING REF COUNT: MARPAT 141:157117
9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD

(11 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 6 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN GI

AB Title compds. e.g. (I; Y, Z = N, CH; W = Q1, Q2, Q3, etc.), were prepared Thus, $4-[(4-A\min o-6-(2-indanylamino)-[1,3,5]triazin-2-$

yl)amino]methyl]benzoic acid (preparation given) in DMF was stirred with Et3N, BOP, and 1,2-phenylenediamine to give 63%

 $\begin{array}{lll} 4-[(4-Amino-6-(2-indanylamino)-[1,3,5]triazin-2-y1)\,amino]methyl]-N-(2-aminophenyl)\,benzamide. The latter inhibited human histone deacetylase HDAC-1 with ICSO = 0.4 <math display="inline">\mu M. \end{array}$

ACCESSION NUMBER: 2004:589250 CAPLUS

DOCUMENT NUMBER: 141:140470

TITLE: Preparation of aminophenylbenzamides as inhibitors of histone

deacetylase

INVENTOR(S): Delorme, Daniel; Zhou, Zhihong

PATENT ASSIGNEE(S): Methylgene, Inc., Can.

SOURCE: U.S. Pat. Appl. Publ., 318 pp., Cont.-in-part of U.S.

Ser. No. 242,304. CODEN: USXXCO DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3 PATENT INFORMATION:

PA'	TENT	NO.			KIN)	DATE			APP:	LICAT	ION	NO.		D	ATE		
IIS	2004	0142	953		Δ1		2004	0722		IIS :	2003-	3585	56		2	กกรก	204	<
US	2004	0106	599		A1		2005	0603		US :	2002-	2423	04		2	0020	912	<
US	7595	2100	16		B2		2009	0929		211	2004-	2100	16		2	0040	204	/
CA	2515	338	10		A1		2004	0819		CA :	2004-	2515	338		2	0040	204	<
CA	2515	338			C		2008	0916			2004- 2004-							
WO	2004	0698	23		A1		2004	0819		WO :	2004-	CA13	9		2	0040	204	<
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	RW:										, SZ,							
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											, BJ,	CF,	CG,	CI,	CM,	GA,	GN,	
							SN,											
EP											2004-							
	R:										, IT,							
CM	1723	207	51,	ы,	ъ,	гı,	2006	0118	CI,	CM .	, IK,	200,	1769	EE,	по,	0 0 0 4 0	204	
BR	2004	0071	95		A		2006	0214		BR :	2004-	7195	1,00		2	0040	204	
JP	2006	5149	98		Т		2006	0518		JP :	2005-	5182	41		2	0040	204	
JP	3908	773			B2		2007	0425			2004- 2004- 2005- 2005-							
US	2006	0058	298		A1		2006	0316		US :	2005-	8109	5		2	0050	315	
JP	2005	2556	83		A		2005	0922		JP :	2005-	8031	0		2	0050	318	
US	2005	0288	282		A1		2005	1229		US :	2005- 2005- 2005-	9102	5		2	0050	325	
KR	8938	04			B1		2009	0420		KR :	2005-	7099	63		2	0050	602	
PLX	2005	10101	604		A		2005	1100		DIA .	2005-	8240	0.4		2	0050	010	
TIV	2005	2520	47		A9		2007	0111		AII :	2005-	2520	47		2	0050	214	
MX IN AU AU IORIT	2006	2520	47		A1		2007	0111				2020			-	0001		
ORIT	Y APP	LN.	INFO	. :			=			US :	2001-	3224	02P		P 2	0010	914	
										HS :	2002-	3917	28P		P 2	0020	626	
										US :	2002-	2423	04		A2 2	0020	912	
										AU :	2002- 2002- 2003-	3276	27		A3 2	0020	912	
										JP :	2003-	5285	44		A3 2	0020	912	
							2007			US :	2003- 2004-	3585	56		A 2	0030	204	
IER S	TIRCE	(8) .			MARI	тас	141.	1404	70	WU.	2004-	CAIS	,		vi Z	0040	204	
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RECORD (22 CITINGS)

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 7 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

AB The (R) and (S) enantiomers of the title compound I [Ar = (un)substituted (hetero)aryl; Rl = H, (un)substituted Ph, alkyl, alkenyl; R2 = H, alkyl; or Rl together with Ar group form a tetrahydronaphthalene, indane or dibenzosuberane ring] which are novel antiproliferative therapeutic agents, were prepared and formulated. E.g., a 2-step synthesis of (R)-thiophene-2,5-dicarboxylic acid 2-hydroxyamide-5-[(l-phenylethyl)amide], starting from Me thiophene-2,5-dicarboxylate and (R)-l-phenylethylamine, was given. The compds. I have HDAC inhibitor activity (data given) and are useful in the treatment of cancer. Also disclosed are methods of making

and using compds. I, as well as pharmaceutical compns. containing compds. I. ACCESSION NUMBER: 2004:513340 CAPLUS

DOCUMENT NUMBER: 141:71436
TITLE: Preparation of thiophene hydroxamic acid derivatives

as HDAC inhibitors for treating cancer

INVENTOR(S): Grossmann, Adelbert; Herting, Frank; Koerner, Matthias; Kuenkele, Klaus-Peter; Limberg, Anja;

Mundigl, Olaf; Tibes, Ulrich
PATENT ASSIGNEE(S): Hoffmann-La Roche Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 24 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

	ENT						DATE			APPL						ATE		
US	2004	0122	079		A1		2004									0031	210	<
	7098						2006											
CA	2507	629			A1		2004	0701		CA 2	003-	2507	629		2	0031	215	<
WO	2004	0549	99		A1		2004	0701		WO 2	003-	EP14	235		2	0031	215	<
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
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		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	
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		NZ,	OM,	PG,	PH,	PL,	PT,	RO.	RU,	SC.	SD,	SE,	SG,	SK.	SL,	SY,	TJ,	
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	RW:	BW.	GH.	GM.	KE.	LS.	MW,	MZ.	SD.	SL.	SZ.	TZ.	UG.	ZM.	ZW.	AM.	AZ.	
							TJ,											
							HU,											
							CI,											
AU	2003																	
EP	1575	933			A1		2005	0921		EP 2	003-	7892	78		2	0031	215	
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BR	2003																215	
	1726																	
CN	1003	9195	4		C		2008			011 2	000	0010	0000		_	0001		
	2006									TP 2	004-	5604	0.8		2	0031	215	
	2348						2009									0031		
									318 MX 2005-5									
	7819				B1		2007			KR 2						0050		

IN 2005CN01553 A 20070427 IN 2005-CN1553 20050708 PRIORITY APPLN. INFO.: EP 2002-28038 A 20021215 W0 2003-EP14235 W 20031216

OTHER SOURCE(S): MARPAT 141:71436 W 2003-EF14235 W 20031215
OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD

(10 CITINGS)

REFERENCE COUNT: 71 THERE ARE 71 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 8 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

AB The invention discloses a method for delivering a gene product to an animal. The method comprises administering an expression vector comprising a nucleic acid sequence operably linked to a promoter and encoding a gene product, and upregulating transcription of the nucleic acid sequence in the ocular cell. The expression vector can be an adenoviral vector. The invention further provides a method of prophylactically or therapeutically treating an animal for at least one ocular-related disorder. The method comprises contacting an ocular cell with an expression vector comprising a nucleic acid sequence encoding an inhibitor of angiogenesis and/or a neurotrophic agent. In one aspect, the method further comprises upregulating transcription of the nucleic acid sequence. Preferably, if 2x108 adenoviral particles of the inventive method are administered to a mouse, the level of expression of the nucleic acid sequence is not diminished more than ten-fold at 28 days post-administration.

ACCESSION NUMBER: 2004:486381 CAPLUS

DOCUMENT NUMBER: 141:47376

TITLE: Gene product delivery for treating ocular-related

disorders
INVENTOR(S): McVey, Duncan L.; Brough, Douglas E.; Kovesdi, Imre;

Wei, Lisa

PATENT ASSIGNEE(S): Genvec, Inc., USA

SOURCE: PCT Int. Appl., 88 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

		ENT I				KIN		DATE				ICAT					ATE		
		2004									WO 2	003-	US38	169		2	0031	201 <	-
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												MW, SG,							
		RW:										YU,				ZW.	AM.	AZ.	
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			TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD, TO	
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PRIOR:	1.17	APP.	LM.	TNEO	. :						US 2	002-	4306	I/P	1	P 2	0021	202	

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

REFERENCE COUNT:

L20 ANSWER 9 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN GI

1

Thiophene-2-hydroxamic acids (shown as I; variables defined below; e.g. II) and corresponding N-oxides, pharmaceutically acceptable salts, solvates and prodrugs of such compds. and their use in the treatment of diseases associated with histone deacetylase enzymic activity (e.g. cancer, psoriasis, fibroproliferative disorders, smooth muscle cell proliferation disorders, etc.) are claimed. Although the methods of preparation are not claimed, >100 example prepns. are included. For example, 5-(2-methyl-5-trifluoromethyl-2H-pyrazol-3-yl)thiophene-2carboxylic acid hydroxyamide was prepared in 96% yield deprotection of 5-(2-methyl-5-trifluoromethyl-2H-pyrazol-3-yl)thiophene-2-carboxylic acid (tetrahydropyran-2-yloxy)amide in MeOH using p-toluenesulfonic acid; the reactant was prepared in 78% yield by amide formation of 5-[2-methyl-5-(trifluoromethyl)-2H-pyrazol-3-yl]thiophene-2-carboxylic acid with O-(tetrahydro-2H-pyran-2-v1)hydroxylamine in DMF using diisopropylethylamine and O-(7-azabenzotriazol-1-yl)-N,N,N',N'tetramethyluronium hexafluorophosphate. Histone deacetylase inhibitory activity is reported for 6 examples of I, e.g. IC50 0.062 µM for II; 5 of these were tested for their ability to reduce cell proliferation in 2 cell lines (MCF-7 and MDA-MB-231; human mammary gland adenocarcinoma), e.g. IC50 = 0.6 and 2.0 μM , resp. for II. For I: R1 = arvl or heteroarvl, each (un)substituted by ≥1 R3, alkylenedioxy, carboxy, cyano, halo, hydroxy, nitro, haloalkyl, haloalkoxy, -C(0)R3, -C(0)OR3, -C(:Z)NR4R5, -NR4R5, -NR6C(0)OR3, -NR6C(O)NR4R5, -NR6C(:Z)R3, -OC(O)NR4R5, -NR6SO2R3, -OR3, -OC(O)R3, -SH, -SR3, -SOR3, -SO2R3 and -SO2NR4R5; R2 = H, chloro, cyano, fluoro, alkoxy, alkyl, or haloalkyl; R3 = aryl, heteroaryl, cycloalkyl, cycloalkenyl, heterocycloalkyl or R7; R4 and R5 = H, alkyl, alkenyl, aryl, heteroaryl, cycloalkyl, cycloalkenyl or heterocycloalkyl, wherein said alkyl or alkenyl are (un) substituted by aryl, heteroaryl, cycloalkyl, cycloalkenyl or heterocycloalkyl; or the group -NR4R5 may form a cyclic amine; R6 = H or lower alkyl; R7 = alkyl, alkenyl and alkynyl, wherein said alkyl, alkenyl or alkynyl are (un)substituted by ≥1 aryl, heteroaryl, cycloalkyl, cycloalkenyl, heterocycloalkyl, hydroxy, -C(:Z)NR4R5, -NR4R5, -NR6C(:Z)R8, -OC(O)NR4R5, -NR6C(O)OR8, -NR6C(O)NR4R5, -NR6SO2R8, -OR8, -SOR8, SO2R8 and -SO2NR4R5; R8 = alkyl, alkenyl or alkynyl, (un)substituted by ≥1 aryl, heteroaryl, cycloalkyl, cycloalkenyl,

II

heterocycloalkyl, hydroxy and halogen; or R8 = aryl, heteroaryl,

cycloalkyl, cycloalkenyl or heterocycloalkyl; and Z is O or S.

ACCESSION NUMBER: 2004:120847 CAPLUS DOCUMENT NUMBER: 140:163701

TITLE: Preparation of substituted thiophene-2-hydroxamic

acids as histone deacetylase

inhibitors useful against disorders involving

increased cell proliferation

Archer, Janet Ann; Bordogna, Walter; Bull, Richard INVENTOR(S): James; Clark, David Edward; Dvke, Hazel Joan; Gill,

Matthew Iain Andrew; Harris, Neil Victor; Van Den

Heuvel, Marco; Price, Stephen

PATENT ASSIGNEE(S): Argenta Discovery Limited, UK SOURCE: PCT Int. Appl., 218 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE . English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PA.	TENT :				KIN	D	DATE				ICAT				D.	ATE		
WO	2004				A1		2004	0212							2	0030	724	<
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
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		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	
		PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	TM,	TN,	
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		KG,	ΚZ,	MD,	RU,	ΤJ,	TM,	AT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
							IE,											
							CM,											
	2494						2004											
	2003																	<
EP	1525																	
	R:						ES,										PT,	
							RO,											
	2003																	
CN	1684 2005	957			A		2005	1019										
											004-							
	2005										005-							
	2005						2005				005-							
	2006				A1		2006	0608			005-							
PRIORIT	Y APP	LN.	INFO	. :							002-				A 2			
											003-				A 2			
										WO 2	003-	GB31	68		W 2	0030	124	
OTHER SO	JURCE	(5):			MAR	PAT	140:	1637	υT									

OS.CITING REF COUNT: 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS

RECORD (32 CITINGS)

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB The title compds. [I; ring A = heterocyclyl; m = 0-4; R1 = OH, halo, CF3, CN; ring B = thienyl, thiadiazolyl, thiazolyl, pyrimidyl, pyrazinyl, pyridazinyl and pyridyl; R2 = halo; n = 0-2; R4 = OH, halo, CF3, CN; p = 0-4; R3 = NH2, OH] or pharmaceutically acceptable salts or in-vivo hydrolysable ester or amide thereof, useful in the treatment of diseases or medical conditions mediated by histone deacetylase such as cancer, were prepared Thus, coupling

N-(2-tert-butoxycarbonylaminophenyl)-5-bromothiophene-2-carboxamide with pyridine-3-boronic acid in the presence of Pd(PPh3)4 followed by Boc-group removal afforded II. The compds. I showed IC50 of < 2.5 µM against recombinant human HDAC1 produced in Hi5 insect cells. The pharmaceutical

compns. containing the compound I are claimed.

2003:892611 CAPLUS

ACCESSION NUMBER:

DOCUMENT NUMBER: 139:381375

TITLE: Preparation of amides as inhibitors of

histone deacetylase INVENTOR(S): Stokes, Elaine Sophie Elizabeth; Waring, Michael

James; Gibson, Keith Hopkinson

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Astrazeneca UK Limited

SOURCE: PCT Int. Appl., 88 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

LANGUAGE:

PATENT I				KIN	D	DATE			APPL	ICAT					ATE	
WO 2003	0926	86		A1		2003	1113		WO 2	003-	GB17	03		2	0030	417 <
W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
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	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,
	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,
	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,
	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW					
RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
	KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
	FΙ,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
	BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE.	SN,	TD,	TG

CA	2484065	A1	20031113	CA 2003-2484065	20030417 <
AU	2003226553	A1	20031117	AU 2003-226553	20030417 <
EP	1501508	A1	20050202	EP 2003-747499	20030417
EP	1501508	B1	20070221		
	R: AT, BE,	CH, DE, DK	, ES, FR, G	GB, GR, IT, LI, LU,	NL, SE, MC, PT,
	IE, SI,	LT, LV, FI	, RO, MK, C	CY, AL, TR, BG, CZ,	EE, HU, SK
BR	2003009553	A	20050209	BR 2003-9553	20030417
CN	1662236	A	20050831	CN 2003-814828	20030417
JP	2005530748	T	20051013	JP 2004-500870	20030417
AT	354366	T	20070315	AT 2003-747499	20030417
ES	2280768	T3	20070916	ES 2003-747499	20030417
IN	2004DN03153	A	20050401	IN 2004-DN3153	20041013
NO	2004004557	A	20041022	NO 2004-4557	20041022 <
US	20050222410	A1	20051006	US 2004-512808	20041026
ZA	2004008666	A	20061025	ZA 2004-8666	20041026
MX	2004010686	A	20041213	MX 2004-10686	20041027 <
HK	1072365	A1	20070706	HK 2005-105019	20050615
PRIORIT	Y APPLN. INFO.	:		GB 2002-9715	A 20020427
				WO 2003-GB1703	W 20030417

OTHER SOURCE(S):

MARPAT 139:381375 15

OS.CITING REF COUNT: THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)

REFERENCE COUNT: THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 11 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

The present invention relates to methods for diagnosing the metastatic potential of hepatocellular carcinoma (HCC) in HCC patients and methods for diagnosing the potential of developing HCC in patients with chronic liver diseases. A computer readable medium, a digital computer, and a system useful for such diagnosis are also provided. Further disclosed are methods for identifying potential therapeutic targets for treating metastasis in HCC patients and methods for preventing HCC in patients with chronic liver diseases. Based on UniGene (UG) database compiled by NCBI, two sets of gene clusters are identified by the gene profiling method: a metastatic gene expression predictor correlated with the diagnosis of metastatic HCC and a HCC gene expression predictor correlated with the diagnosis of patients likely to develop HCC. Among them, osteopontin (OPN) and EpCAM (epithelial cell adhesion mol., also known as TACSTD1, encoded by gene GA733-2) are used as the major therapeutic targets (both sequences claimed but not provided). In addition, the invention provides methods for inhibiting metastasis in HCC patients by suppressing the function of one therapeutic target, osteopontin, and methods for preventing the development of HCC in patients with chronic liver diseases by suppressing the function of one therapeutic target, EpCAM. Pharmaceutical compns. containing agents capable of inhibiting the functions

of osteopontin or EpCAM are also disclosed.

ACCESSION NUMBER: 2003:837370 CAPLUS

DOCUMENT NUMBER: 139:333972

TITLE: Gene profiling methods of diagnosing potential for metastasis or developing hepatocellular carcinoma and

of identifying therapeutic targets

Wang, Xin Wei; Ye, Qing-hai; Kim, Jin Woo INVENTOR(S): PATENT ASSIGNEE(S):

The Government of the United States of America, as Represented by the Secretary of the Department of

Health and Human Services, USA

SOURCE: PCT Int. Appl., 141 pp.

CODEN: PIXXD2 Patent

DOCUMENT TYPE: LANGUAGE: English FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

	TENT				KIN	D	DATE			APPL	ICAT	ION	NO.			ATE		
	2003				A2		2003			WO 2	003-	US10	783				404 <	
WO	2003	0877	66		A3		2004	0729										
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE.	ES,	FI,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	
		PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW						
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,	
		KG,	ΚZ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
		FΙ,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
AU	2003	2308	38		A1		2003	1027		AU 2	003-	2308	38		2	0030	404 <	
CN	1659	287			A		2005	0824		CN 2	003-	8129	82		2	0030	404	
RIORIT:	Y APP	LN.	INFO	. :						US 2	002-	3708	95P		P 2	0020	405	
										WO 2	003-	US10	783		W 2	0030	404	
S.CITI	NG RE	F CO	UNT:		1	T	HERE	ARE	1 C	APLU:	S RE	CORD	S TH	AT C	ITE	THIS	RECORD	

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

(1 CITINGS)

L20 ANSWER 12 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN GT

REFERENCE COUNT:

The title compds. [I; ring A = heterocyclyl; m = 0-4; R1 = OH, halo, CF3, CN, etc.; R2 = halo; n = 0-2; R3 = NH2, OH; R4 = OH, halo, CF3, CN, etc.; p = 0-4; or pharmaceutically-acceptable salts or in-vivo-hydrolysable esters or amides thereof], useful in the treatment of diseases or medical conditions mediated by histone deacetylase such as cancer, were prepared Thus, deprotection of N-(2-tert-butoxycarbonylaminophenyl)-4-(pyridin-4-yl)benzamide (preparation given) with 4M HCl solution in dioxane afforded 46% I.HCl [A = pyridin-4-yl; R2 = H; R3 = NH2; R4 = H]. The compds. I showed IC50 of < 50.0 μ M in in vitro enzyme assay of pooled histone deacetylases. Pharmaceutical composition comprising the compound I is claimed. ACCESSION NUMBER: 2003:837045 CAPLUS DOCUMENT NUMBER: 139:337995

TITLE: Preparation of benzamides as histone

deacetylase inhibitors

INVENTOR(S): Stokes, Elaine Sophie Elizabeth; Roberts, Craig

Anthony; Waring, Michael James

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Astrazeneca UK Limited

SOURCE: PCT Int. Appl., 94 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2003087057 W: AE, AG, AL CO, CR, CU GM, HR, HU LS, LT, LU PH, PL, PT TZ, UA, UG RW: GH, GM, KE KG, KZ, MD FT, FR, CB	A1 2003102 , AM, AT, AU, AZ , CZ, DE, DK, DM J, ID, IL, IN, IS , LV, MA, MD, MG , RO, SC, SD S, US, UZ, VC, VN , LS, MW, MZ, SD O, RU, TJ, TM, AT O, GR, HU, IE, IT	3 WO 2003-GB1442 , BA, BB, BG, BR, BY, B , DZ, EC, EE, ES, FI, G , JP, KE, KG, KP, KR, K , MK, MN, MM, MX, MZ, N , SE, SG, SK, SL, TJ, T , YU, ZA, ZM, ZW , SI, SZ, TZ, UG, ZM, Z , BE, BG, CH, CY, CZ, D , LU, MC, NL, PT, RO, S	20030402 < \(\) 27, CA, CH, CN, \(\) BB, GD, GE, GH, \(\) CZ, LC, LK, LR, \(\) II, NO, NZ, OM, \(\) M, TN, TR, TT, \(\) W, AM, AZ, BY, \(\) EP, DK, EE, ES, \(\) E, SI, SK, TR, \(\)
		, GN, GQ, GW, ML, MR, N	
		3 CA 2003-2480356	
AU 2003217054 AU 2003217054	A1 2003102	7 AU 2003-217054	20030402 <
AU 2003217054	B2 2009012	9 4 BR 2003-8875	20020102
EP 1495002	A 2005010	4 BR 2003-8875 2 EP 2003-712442	20030402
		, GB, GR, IT, LI, LU, N	
		CY, AL, TR, BG, CZ, E	
		O CN 2003-807431	
JP 2005533011	T 2005110	4 JP 2003-584013	20030402
NZ 535143	A 2007042	7 NZ 2003-535143	20030402
TN 2004DN02719	A 2007030	7 NZ 2003-535143 2 IN 2004-DN2719	20040915
ZA 2004007502	A 2006042	6 ZA 2004-7502	20040917
US 20050171103	A1 2005080	4 US 2004-509941	20041001
MX 2004009689	A 2005011	1 MX 2004-9689	20041004
NO 2004004444	A 2004122	8 NO 2004-4444	20041019 <
US 20090029991	A1 2009012	9 US 2008-211510	20080916
IN 2008DN07969	A 2009052	9 IN 2008-DN7969	20080922
PRIORITY APPLN. INFO.:		2 IN 2004-DN2/19 6 ZA 2004-7502 4 US 2004-509941 1 MX 2004-9689 8 NO 2004-4444 9 US 2008-211510 1 N 2008-217510 GB 2002-7863 GB 2002-29930	A 20020405
		GB 2002-29930	A 20021221
		US 2004-509941	B1 20041001
OTHER SOURCE(S):			
OS.CITING REF COUNT:	20 THERE AR	E 20 CAPLUS RECORDS THA	T CITE THIS
REFERENCE COUNT:	RECORD (ZZ CITINGS)	
REFERENCE COUNT:	8 THERE AR	E 8 CITED REFERENCES AV	ALLABLE FOR THIS

L20 ANSWER 13 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

AB This invention relates to the identification and use of gene expression patterns (or profiles or "signatures") which are correlated with (and thus able to discriminate between) cells in various stages and/or grades of breast cancer. Broadly defined, these stages are non-malignant vs. malignant, but may also be viewed as normal vs. atypical (optionally including reactive and pre-neoplastic) vs. cancerous. Another definition of the stages is normal vs. precancerous (e.g. atypical ductal hyperplasia or atypical lobular hyperplasia) vs. cancerous (e.g., carcinoma in situ such as ductal carcinoma in situ (DCIS) and/or lobular carcinoma in situ (LCIS)) vs. invasive (e.g. carcinomas such as invasive ductal carcinoma and/or invasive lobular carcinoma). The signature profiles are identified based upon multiple sampling of reference breast tissue samples from independent cases of breast cancer and provide a reliable set of mol. criteria for identification of cells as being in one or more particular stages and/or grades of breast cancer. The gene CRIP1 is especially prominent and thus may be a potential biomarker for the detection of breast cancer including the pre-malignant stage of atypical ductal hyperplasia. The epithelium-specific transcription factor ELF5 is also noteworthy since it

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

maps to chromosome 11p13-15, a region subject to frequent loss of heterzygosity and rearrangement in multiple carcinoma including breast cancer.

ACCESSION NUMBER: 2003:836498 CAPLUS

DOCUMENT NUMBER: 139:336483

TITLE: Gene expression profiles for diagnostic and prognostic grading of breast cancer and for drug screening

INVENTOR(S): Erlander, Mark G.; Ma, Xiao-Jun; Sgroi, Dennis C.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 36 pp., Cont.-in-part of U.S.

Ser. No. 28,018. CODEN: USXXCO Patent

DOCUMENT TYPE: LANGUAGE: English FAMILY ACC. NUM. COUNT: 4

PATENT NO		KIND	DATE	APPLICATION NO.	
US 200301 US 200400 US 200302 WO 200306 W: A	02067 36632 0164	A1 A1	20040101 20031225 20030724	US 2002-211015 US 2001-28018 US 2002-282596 WO 2002-US41216 BA, BB, BG, BR, BY, BZ	20011221 < 20021028 < 20021220 <
C G L P U	O, CR, CU, M, HR, HU, S, LT, LU, L, PT, RO, A, UG, US,	CZ, DE ID, IL LV, MA RU, SC UZ, VC	, DK, DM, , IN, IS, , MD, MG, , SD, SE, , VN, YU,	DZ, EC, EE, ES, FI, GB JP, KE, KG, KP, KR, KZ MK, MN, MW, MX, MZ, NO SG, SK, SL, TJ, TM, TN ZA, ZM, ZW	, GD, GE, GH, , LC, LK, LR, , NZ, OM, PH, , TR, TT, TZ,
K F C	G, KZ, MD, I, FR, GB, F, CG, CI,	RU, TJ GR, IE CM, GA	, TM, AT, , IT, LU, , GN, GQ,	SL, SZ, TZ, UG, ZM, ZW BE, BG, CH, CY, CZ, DE MC, NL, PT, SE, SI, SK GW, ML, MR, NE, SN, TD	, DK, EE, ES, , TR, BF, BJ, , TG
WO 200306 WO 200306			20030724	WO 2002-US41347	20021220 <
W: A C G L P U. RW: G	E, AG, AL, O, CR, CU, M, HR, HU, S, LT, LU, L, PT, RO, A, UG, US, H, GM, KE, G, KZ, MD,	AM, AT CZ, DE ID, IL LV, MA RU, SC UZ, VC LS, MW RU, TJ	, AU, AZ, , DK, DM, , IN, IS, , MD, MG, , SD, SE, , VN, YU, , MZ, SD, , TM, AT,	BA, BB, BG, BR, BY, BZ DZ, EC, EE, ES, FI, GB JP, KE, KG, KP, KR, KZ MK, MN, MW, MX, MZ, NC SG, SK, SL, TJ, TM, TN ZA, ZM, ZW SL, SZ, TZ, UG, ZM, ZW BE, BG, CH, CY, CZ, DE	, GD, GE, GH, , LC, LK, LR, , NZ, OM, PH, , TR, TT, TZ, , AM, AZ, BY, , DK, EE, ES,
				MC, NL, PT, SE, SI, SK GW, ML, MR, NE, SN, TD	
AU 200235 AU 200236 US 200602 US 200602 US 200900 PRIORITY APPLN	8279 0769 63806 34287 92973	A1	20030730	AU 2002-358279 AU 2002-360769 US 2006-381353 US 2006-426572 US 2007-46835 US 2001-28018 US 2002-211015 US 2002-282596 WO 2002-US41216	20021220 < 20021220 < 20060502 20060626 20071128 A2 20011221 A2 20020801 A 20021028

This invention comprises the novel compds. (I) (wherein n = 1-3, m = 1-4, Q, X, Y = N, CH; Z = N, CH; R1 = (un)substituted amido, acylamido, quandido, and other Zn chelating group, etc.; R2 = H, halo, OH, NH2, NO2, C1-6alkyl, C1-6alkoxy, CF3, di(C1-6alkyl)amino, HONH, naphthalenylsulfonylpyrazinyl; R3 = H aryl; R4 = H, HO, NH2, hydroxyC1-6alkyl, C1-6alkyl, C1-6alkoxy, arylC1-6alkyl, aminocarbonyl, hydroxycarbonyl, aminoC1-6alkyl, aminocarbonylC1-6alkyl, hydroxycarbonylC1-6alkyl, hydroxyaminocarbonyl, C1-6alkoxycarbonyl, C1-6alkylamino, di(C1-6alkyl)aminoC1-6alkyl; L = nul or bivalent radical selected from C1-6alkanediyl, amino, carbonyl or aminocarbonyl; A = aryl, cyclohexyl, heterocyclic derivs.), having histone deacetylase inhibiting enzymic activity; their preparation, compns. containing them and their use as a medicine. For example, 4-(4-(2-naphthylsulfonyl)piperazin-1-yl)-N-hydroxybenzamide in 100% yield was prepared by the hydrogenation of 4-(4-(2-naphthylsulfonyl)piperazin-1-yl)-N-(phenylmethoxy)benzamide (II) in THF by Pd/C as a catalyst. II was prepared from 1,1-dimethylethyl 4-(4-carboxyphenyl)-1-piperazinecarboxylate and O-(phenylmethyl)hydroxylamine hydrochloride in presence of dimethylaminopyridine in CH2C12 and diisopropylcarbodiimide, forming 1,1-dimethylethyl 4-[4-[(phenylmethoxy)amino]carbonylphenyl]-1piperazinecarboxylate which was saponified and subsequently reacted with 2-naphthalenesulfonyl chloride to give the II. ACCESSION NUMBER: 2003:737742 CAPLUS

INVENTOR(S):

139:276884

DOCUMENT NUMBER: TITLE:

Preparation of sulfonyl-derivatives as novel inhibitors of histone

deacetylase

Van Emelen, Kristof; Arts, Janine; Backx, Leo Jacobus Jozef; De Winter, Hans Louis Jos; Van Brandt, Sven Franciscus Anna; Verdonck, Marc Gustaaf Celine;

Meerpoel, Lieven; Pilatte, Isabelle Noeelle Constance; Poncelet, Virginie Sophie; Dyatkin, Alexey Borisovich Janssen Pharmaceutica N.V., Belg.; et al.

PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 139 pp.

CODEN: PIXXD2 Patent

DOCUMENT TYPE: LANGUAGE: English FAMILY ACC. NUM. COUNT: 8

PAT	ENT 1	NO.			KIN	D	DATE		- 1	APPL	ICAT	ION	NO.		D	ATE		
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WO	2003	0764	22		A1		2003	0918	1	WO 2	003-	EP25	16		2	0030	311 <-	
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	1485365		A1	20041215 20080514	EP 2003-711982		20030311 <
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PRIORIT	Y APPLN. I	NFO.:			US 2002-363799P	P	20020313
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					WO 2003-EP2516		
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OTHER SOURCE(S): MARPAT 139:276884

OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS

RECORD (20 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 15 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN GI

$$\begin{array}{c|c} R^1 & Q-X & R^3 \\ & & & \\ & &$$

AB The title compds. I [Q, X, Y = N, (un)substituted CH; R1 = (un)substituted CONH2, NHCHO, COalkanediylSH, CONHOH, NHCOC:NHOH or other Zn-chelating group; R2 = H, halogen, OH, amino, NO2, alkyl, alkoxy, CF3, dialkylamino, NHOH, naphthalenylsulfonylpyrazinyl; R3 = H, OH, amino, (un)substituted alkyl, alkoxy, CONH2, CO2H; R4 = H, alkyl, cycloalkyl, hydroxyalkyl, alkoxyalkyl, dialkylaminoalkyl, aryl; L = bond, NH, alkanediylamino; A = (un) substituted Ph, cyclohexyl, heterocyclic, heteroaryl, naphthyl; n = 0-31 were prepared for use as histone deacetylase inhibitors in the treatment of proliferative diseases. Thus, the carbamoylpiperazinylpyrimidinecarboxamide II was prepared from piperazine, Et 5-methylsulfonylpyrimidine-2-carboxylate, and Ph2NCOC1 in 5 steps. II had pIC50 for inhibition of histone deacetylase of

7.127 and for antiproliferative activity against A2780 cells of 6.114.

ACCESSION NUMBER: 2003:737741 CAPLUS

DOCUMENT NUMBER: 139:261323

TITLE: Preparation of aminocarbonyl derivatives as

inhibitors of histone

deacetylase

Van Emelen, Kristof; De Winter, Hans Louis Jos; INVENTOR(S): Dvatkin, Alexev Borisovich; Verdonck, Marc Gustaaf

Celine; Meerpoel, Lieven PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg. Patent

SOURCE: PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 8 PATENT INFORMATION:

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		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	
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EP	1485	364			A1		2004	1215		EP 2	003-	7082	14		2	0030	311 <	
EP	1485																	
	R:						ES,										PT,	
							RO,											
CN	1639 1642 2005	125			A		2005	0713		CN 2	003-	8056	75		2	0030	311	
CN	1642	551			A		2005	0720		CN 2	003-	8058	33		2	0030	311	
JP	2005	5239	07		Т		2005	0811		JP 2	003-	5746	40		2	0030	311	
CN	1010 4251 4243	0780	3		A		2007	0801		CN 2	007-	1000	5212		2	0030	311	
AT	4251	52			T		2009											
AT	4243	95			Т		2009											
CN	1014	5093	4		A		2009									0030		
	T 101450934 S 2322252				Т3		2009											
	3 2322950														20030311			
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ZA	2004	0072	35		A		2005	1004	ZA 2004-7235					20040909				

US 20050222414	A1	20051006	US	2004-507271		20040909
US 7501417	B2	20090310				
ZA 2004007232	A	20051006	za	2004-7232		20040909
ZA 2004007233	A	20051006	zA	2004-7233		20040909
ZA 2004007234	A	20051006	ZA	2004-7234		20040909
ZA 2004007236	A	20051006	zA	2004-7236		20040909
PRIORITY APPLN. INFO.:			US	2002-363799P	P	20020313
			US	2002-420989P	P	20021024
			WO	2002-EP14833	A	20021223
			CN	2003-805921	A3	20030311
			CN	2003-805952	A3	20030311
			WO	2003-EP2511	W	20030311
ORUED COUDON (C)	142 DD2 F	120 261222				

OTHER SOURCE(S): MARPAT 139:261323

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 16 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

AB The title compds. I [O, X, Y, Z = N, (un)substituted CH; R1 = (un)substituted CNH2, NHCH0, COalkanediylSH, CONHOH, NHCOC:NHOH or other Zn-chelating group; R2 = H, halogen, OH, amino, NO2, alkyl, alkoxy, CF3, dialkylamino, NHOH, naphthalenylsulfonylpyrazinyl; R3 = H, aryl; R4 = H, OH, amino, (un)substituted alkyl, alkoxy, COH2, CO2H; R5 = H, alkyl, cycloalkyl, hydroxyalkyl, alkoxyalkyl, dialkylaminoalkyl, aryl; A = (un)substituted Ph, cyclohexyl, heterocyclic, heteroaryl, naphthyl; n = 0-3; p = 0-4) were prepared for use as histone deacetylase inhibitors in the treatment of proliferative diseases. Thus, the sulfonylaminopiperidine II was prepared from Et 4-aminopiperidine-1-carboxylate, 2-naphthalenesulfonyl chloride, and Et 2-methylsulfonylpyrimidine-5-carboxylate in 6 steps. II had pIC50 for inhibition of histone deacetylase of 6.523 and for antiproliferative activity against A2780 cells of 5.277.

ACCESSION NUMBER: 2003:737724 CAPLUS DOCUMENT NUMBER: 139:276820

TITLE: Preparation of sulfonylaminopiperidine derivatives as

inhibitors of histone

deacetylase

INVENTOR(S): Van Emelen, Kristof; Backx, Leo Jacobus Jozef; Van Brandt, Sven Franciscus Anna; Angibaud, Patrick Rene;

Pilatte, Isabelle Noeelle Constance; Verdonck, Marc

Gustaaf Celine; De Winter, Hans Louis Jos Janssen Pharmaceutica N.V., Belg.

CODEN: PIXXD2

Patent

English

PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 91 pp.

DOCUMENT TYPE:

LANGUAGE:

FAMILY ACC. NUM. COUNT: 8

PATENT INFORMATION:

PATENT NO				APPLICATION NO.	
WO 2003076 W: AI CC GI L: PI	5401 E, AG, AL D, CR, CU M, HR, HU S, LT, LU L, PT, RO A, UG, US	A1 , AM, A1 , CZ, DE , ID, II , LV, MZ , RU, SG , UZ, VC	20030918 , AU, AZ, , DK, DM, , IN, IS, , MD, MG, , SD, SE, , VN, YU,	WO 2003-EP2517 BA, BB, BG, BR, BY, DZ, EC, EE, ES, FI, JP, KE, KG, KP, KR, MK, MN, MW, MX, MZ, SG, SK, SL, TJ, TM, ZA, ZM, ZW	20030311 < BZ, CA, CH, CN, GB, GD, GE, GH, KZ, LC, LK, LR, NO, NZ, OM, PH, TN, TR, TT, TZ,
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CA 2476186	5	A1	20030918	CA 2003-2476186 AU 2003-209727	20030311 <
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AU 2003209	2727	B2	20081016		
EP 148535	4	A1	20041215	20030311 <	
EP 148535	4	B1	20080528	EP 2003-743874	
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BR 200300	7599	A	20050201	BR 2003-7599	20030311
CN 164291	2	A	20050720	CN 2003-805951	20030311
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JP 2005526	5763	т	20050908	JP 2003-574622	20030311
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AT 396971		T	20080615	CY, AL, TR, BG, CZ, BR 2003-7599 CN 2003-805951 JP 2003-54761 CN 2007-10005212 AT 2003-743874 CN 2008-10170423 TW 2003-92105280 MX 2004-7776 IN 2004-ND2521 US 2004-507159 NO 2004-4224	20030311
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IN 2004DN	02521	A	20070112	IN 2004-DN2521	20040830
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				US 2002-420989P	P 20021024
				WO 2002-EP14833 CN 2003-805921	A 20021223
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				WO 2003-EP2517	W 20030311
OTHER SOURCE(S)):	MARPA?	139:2768	20 7 CAPLUS RECORDS THE	
OS.CITING REF	COUNT:	7	THERE ARE	7 CAPLUS RECORDS THE	AT CITE THIS RECORD

REFERENCE COUNT:

(9 CITINGS)

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB The title compds. I [O, X, Y = N, (un)substituted CH; R1 = (un)substituted CONH2, NHCHO, COalkanedivlSH, CONHOH, NHCOC: NHOH or other Zn-chelating group; R2 = H, halogen, OH, amino, NO2, alkyl, alkoxy, CF3, dialkylamino, NHOH, naphthalenylsulfonylpyrazinyl; R3 = H, aryl; R4 = H, OH, amino, (un) substituted alkyl, alkoxy, CONH2, CO2H; R5 = H, alkyl, cycloalkyl, hydroxyalkyl, alkoxyalkyl, dialkylaminoalkyl, aryl; L = bond, alkanediyl, alkanediyloxy, amino, CO, CONH; A = (un)substituted Ph, cyclohexyl, heterocyclic, heteroaryl, naphthyl; m = 0, 1; n = 0-3; p = 0-4] were prepared for use as histone deacetylase inhibitors in the treatment of proliferative diseases. Thus, the naphthoylaminomethylpiperidine II was prepared from 2-naphthoyl chloride and 4-aminomethyl-1-tert.-butxycarbonylpiperidine in 6 steps. II had pIC50 for inhibition of histone deacylase of 8.103 and for antiproliferative

activity against A2780 cells of 6.881. ACCESSION NUMBER: 2003:737718 CAPLUS

DOCUMENT NUMBER:

139:261180

TITLE: INVENTOR(S):

SOURCE:

Preparation of carbonylamino derivatives as inhibitors of histone

deacetylase

Van Emelen, Kristof; Verdonck, Marc Gustaaf Celine; Van Brandt, Sven Franciscus Anna; Backx, Leo Jacobus

Т

II

PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.

PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent Enalish

FAMILY ACC. NUM. COUNT: 8

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WO	WO 2003076395					A1 20030918				WO 2	003-	20030311 <						
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	A1	20041215	EP 2003-708215		20030311 <
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US 7446109	B2				
NO 2004004146					20040930 <
US 20090042920		20090212			
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			WO 2002-EP14833		
			CN 2003-805921		20030311
			CN 2003-805952		20030311
			WO 2003-EP2512		
			US 2004-507788	A3	20040913

OTHER SOURCE(S): OS.CITING REF COUNT: MARPAT 139:261180 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS

RECORD (12 CITINGS)
REFERENCE COUNT: 7 THERE ARE 7 CITED R

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 18 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN GI

AB This invention comprises aryl and heteroaryl hydroxamic acids (shown as I; variables defined below; e.g. II) having histone deacetylase inhibiting enzymic activity; their preparation, compns. containing them and their use as a medicine. Compds. I show excellent in-vitro histone deacetylase inhibiting enzymic activity, have advantageous properties with regard to cellular activity and specific properties with regard to inhibition of cell cycle

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progression at both G1 and G2 checkpoints (p21 induction capacity), and
     show good metabolic stability and high bioavailability and more particular
     show oral bioavailability. They can also be used for detection and
     identification of histone deacetylase. General
     synthetic procedures and characterization data for twenty-seven I are
     included; also, prepns. of 12 intermediates are included. For example, a
     59 % yield of 2-[4-(dimethylaminosulfonyl)piperazin-1-yl]pyrimidine-5-
     carbohydroxamic acid was obtained by removing the 0-
     tetrahydropyranyl group of its ester using trifluoroacetic acid;
     the ester was prepared in 61 % vield from
     N'-(ethylcarbonimidoyl)-N, N-dimethyl-1, 3-propanediamine monohydrochloride,
     sodium 2-[4-(dimethylaminosulfonyl)piperazin-1-yl]pyrimidine-5-
     carboxylate, 0-(tetrahydro-2H-pyran-2-yl)hydroxylamine, and
     1-hydroxy-1H-benzotriazole in CH2Cl2/THF. The sodium salt was obtained by
     base hydrolysis of the Et ester; the ester was prepared in 73 % yield from
     Et 2-(piperazin-1-yl)pyrimidine-5-carboxylate and dimethylsulfamoyl
     chloride; Et 2-(piperazin-1-yl)pyrimidine-5-carboxylate was obtained in
     <96 % yield from Et 2-(4-benzylpiperazin-1-yl)pyrimidine-5-carboxylate by
     hydrogenation using Pd/C; the benzyl derivative was obtained from
     1-(phenylmethyl)piperazine, (135 mL) was added gradually to a solution of
     potassium carbonate (0.18 mol) and
     2-(methylsulfonyl)-5-pyrimidinecarboxylic acid Et ester, K2CO3 in MeCN.
     For I: n is 0-3; O, X and Y are N or C; Z is N or CH; R1 is -C(0)NR5R6,
     -N(H)C(O)R7, -C(O)-C1-6alkanedivlSR7, -NR8C(O)N(OH)R7,
     -NR8C(O)C1-6alkanediy1SR7, -NR8C(O)C:N(OH)R7 or another
     Zn-chelating-group; R2 is H, halo, hydroxy, amino, nitro, C1-6alkyl,
     C1-6alkyloxy, trifluoromethyl, di(C1-6-alkyl)amino, hydroxyamino or
     naphthalenylsulfonylpyrazinyl. R3 is H, C1-6-alkyl, arylC2-6alkenediyl,
     furanylcarbonyl, naphthalenylcarbonyl, -C(O)phenylR9,
     C1-6alkylaminocarbonyl, aminosulfonyl, arylaminosulfonyl,
     aminosulfonylamino, di(C1-6-alkyl)aminosulfonylamino,
     arylaminosulfonylamino, aminosulfonylaminoC1-6-alkyl,
     di(C1-6-alkyl)aminosulfonylaminoC1-6-alkyl,
     arylaminosulfonylaminoC1-6alkyl, di(C1-6-alkyl)aminoC1-6alkyl,
     C11-12-alkylsulfonyl, di(C1-6-alkyl)aminosulfonyl,
     trihaloC1-6-alkylsulfonyl, di(aryl)C1-6alkylcarbonyl,
     thiophenylC1-6alkylcarbonyl, pyridinylcarbonyl or arylC1-6alkylcarbonyl.
     R4 is H, hydroxy, amino, hydroxyC1-6alkyl, C1-6alkyl, C1-6alkyloxy,
     arylC1-6alkyl, aminocarbonyl, hydroxycarbonyl, aminoC1-6-alkyl,
     aminocarbonylC1-6-alkyl, hydroxycarbonylC1-6-alkyl, hydroxyaminocarbonyl,
     C1-6-alkyloxycarbonyl, C1-6-alkylaminoC1-6-alkyl or
     di(C1-6-alkvl)aminoC1-6-alkvl; when R3 and R4 are present on the same C
     atom, R3 and R4 together may form -C(O)-NH-CH2-NR10- wherein R10 is H or
     aryl; when R3 and R4 are present on adjacent C atoms, R3 and R4 together
     may form : CH-CH: CH-CH: ; addnl. details are given in the claims.
ACCESSION NUMBER:
                         2003:737586 CAPLUS
DOCUMENT NUMBER:
                         139:261308
TITLE:
                         Preparation of arvl and heteroarvl hydroxamic acids as
                         inhibitors of histone
                         deacetylase for treating proliferative
                         diseases
INVENTOR(S):
                         Van Emelen, Kristof; Verdonck, Marc Gustaaf Celine;
                         Van Brandt, Sven Franciscus Anna; Angibaud, Patrick
                         Rene; Meerpoel, Lieven; Dyatkin, Alexey Borisovich
PATENT ASSIGNEE (S):
                         Janssen Pharmaceutica N.V., Belg.
SOURCE:
                         PCT Int. Appl., 52 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:
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	TENT NO.			KIND DATE				APPLICATION NO.						DATE			
	20030759 W: AE, CO, GM, LS, PL,	AG, A CR, C HR, I	AL, CU, HU, LU, RO,	A1 AM, CZ, ID, LV, RU,	AT DE IL MA SC	2003 AU, DK, IN, MD,	0918 AZ, DM, IS, MG, SE,	BA, DZ, JP, MK, SG,	WO 2 BB, EC, KE, MN, SK,	003- BG, EE, KG, MW, SL,	EP25 BR, ES, KP, MX,	BY, FI, KR, MZ,	BZ, GB, KZ, NO,	CA, GD, LC,	20030311 < CA, CH, CN, GD, GE, GH, LC, LK, LR, NZ, OM, PH, TR, TT, TZ,		
	RW: GH, KG, FI, BF, 2476065	GM, I KZ, I FR, G BJ, G	KE, MD, GB, CF,	LS, RU, GR,	MW TJ HU	MZ, TM, IE,	SD, AT, IT,	SL, BE, LU,	SZ, BG, MC,	TZ, CH, NL,	CY, PT,	CZ, RO,	DE, SE,	DK, SI,	EE, SK,	ES, TR,	
	20032187			A1		2003	0922		AU 2	003-	2187	37			20030	311	<
	20032187 1485099	37		B2 A1		2008	0410		PD 3	002	2110	0.1			20030	211	,
EP		DE (CII														
7.3	IE, 20030076 1642551 20055253 534832 1010780 425152 424395 10145093 2322252 2322950 2004DN02 20040072	24 79 3 4 537 37	LT,	LV, A A A T A T T A T T A	FI		MK, 0111 0713 0720 0825 0930 0801 0315 0610 0618 0702 0112 0928 1004	CY,	AL, BR 2 CN 2 CN 2 JP 2 NZ 2 CN 2 AT 2 AT 2 CN 2 ES 2 ES 2 IN 2 ZA 2	TR, 003- 003- 003- 003- 003- 003- 003- 003- 004- 004- 004-	BG, 7624 8056 8058 5742 5348 1000 7082 7082 1017 7082 7082 7082 7082 7082	CZ, 75 33 03 32 5212 14 16 0423 16 14 37	EE,	HU, SK 20030311 20030311 20030311 20030311 20030311 20030311 20030311 20030311 20030311 20030311 20030311 20040909 20040909 20040909 20040909			
ZA	20040072	33		Α		2005			ZA 2	004-	7233			- :	20040	909	
ZA	20040072 20040072 20040072 20040072 20040087 20050096	34		A		2005			ZA 2	004-	7234			- 3	20040 20040 20040 20040	909	
ZA MY	20040072	36 97		A.		2005			4A 4	004-	2797			:	20040 20040	919	/
US	20050096	468		A1		2005				004-		8.5			20040 20040	913	`
NO	20040041	13		A		2004			NO 2	004-	4113				20040	928	
	Y APPLN.								US 2 WO 2 CN 2 CN 2	002- 002-	4209 EP14 8059 8059	89P 833 21 52		P 2 A 2 A3 2 A3 2	20020 20021 20021 20030 20030	024 223 311 311	
OTHER SO	OURCE(S):		MARE	PAT	139:	26130							W 20030311				
	G REF CO				THERE			CAPL	US R	ECOR	DS T	HAT	CIT	E THI	S		
				1	RECOR	D (1	CI	TING	S)								

L20 ANSWER 19 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

REFERENCE COUNT: 6

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB A series of N-hydroxy-3-phenyl-2-propenamides were prepared as novel inhibitors of human histone deacetylase

⁽HDAC). These compds. were potent enzyme inhibitors, having ICSOs < 400 nM in a partially purified enzyme assay. However, potency in cell growth inhibition assays ranged over 2 orders of magnitude in two human carcinoma cell lines. Selected compds. having cellular IC50 < 750 nM were tested for maximum tolerated dose (MTD) and for efficacy in the HCT116 human colon tumor xenograft assay. Four compds. having an MTD ≥ 100 mg/Kg were selected for dose-response studies in the HCT116

xenograft model. One compound, NVP-LAQ824, had significant dose-related activity in the HCT116 colon and A549 lung tumor models, high MTD, and low gross toxicity. On the basis, in part, of these properties, NVP-LAQ824 has entered human clin. trials in 2002.

2003:726751 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 139:350601

TITLE: N-Hydroxy-3-phenyl-2-propenamides as Novel

Inhibitors of Human Histone

Deacetylase with in Vivo Antitumor Activity:

Discovery of (2E)-N-Hydroxy-3-[4-[[(2-hydroxyethyl)]2-

(1H-indol-3-v1)ethvllaminolmethvllphenvll-2-

propenamide (NVP-LAQ824)

Remiszewski, Stacy W.; Sambucetti, Lidia C.; Bair,

Kenneth W.; Bontempo, John; Cesarz, David; Chandramouli, Nagarajan; Chen, Ru; Cheung, Min;

Cornell-Kennon, Susan; Dean, Karl; Diamantidis, George; France, Dennis; Green, Michael A.; Howell,

Kobporn Lulu; Kashi, Rina; Kwon, Paul; Lassota, Peter; Martin, Mary S.; Mou, Yin; Perez, Lawrence B.; Sharma, Sushil; Smith, Troy; Sorensen, Eric; Taplin, Francis; Trogani, Nancy; Versace, Richard; Walker, Heather;

Weltchek-Engler, Susan; Wood, Alexander; Wu, Arthur; Atadia, Peter

CORPORATE SOURCE: Oncology Research, Novartis Institute for Biomedical

Research, East Hanover, NJ, 07936-1080, USA Journal of Medicinal Chemistry (2003),

46(21), 4609-4624

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 139:350601

OS.CITING REF COUNT: THERE ARE 72 CAPLUS RECORDS THAT CITE THIS

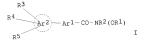
RECORD (72 CITINGS)

THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 35 RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 20 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

SOURCE:

AUTHOR(S):



AB The present invention is directed to certain bicyclic hydroxamic acids (shown as I; variables defined below; e.g. N-hydroxy-4-(3-methoxyphenyl)benzamide) that are inhibitors of histone deacetylase (no data) and are therefore useful in the treatment of diseases associated with histone deacetylase activity. Pharmaceutical compns. (5 examples) and processes for preparing these compds. are also disclosed. For I: R1 is H or alkyl; R2 is H; Arl is phenylene or a six membered heteroarylene ring containing one or two N ring atoms, the rest of the ring atoms being C; wherein said Arl group is (un) substituted with one or two alkyl, halo, hydroxy, alkoxy, haloalkoxy, or haloalkyl; Ar2 is aryl, benzimidazol-2-yl, cycloalkyl or heterocycloalkyl; R3 is H, alkyl, halo, hydroxy, or alkoxy.

R4 and R5 = H, alkyl, halo, haloalkyl, nitro, cyano, carboxy, carboxyalkyl, alkoxycarbonyl, (un)substituted Ph, (un)substituted heteroaryl, (un) substituted heterocycloalkyl, cycloalkyl, heterocycloaminoalkyl, -X-R6, or -(C1-6alkylene)-Y-R7 where X and Y = -0-, -S-, -SO-, -SO2-, -NR8-, -CO-, -NR9CO-, -CONR10-, -NR11SO2-, -SO2NR12-, -NHC(0)0-, -OC(0)NH-, -NR13CONR14-, or -NR15SO2NR16-; addnl. details including provisos are given in the claims. Although the methods of preparation are not claimed, .apprx.20 example prepns. of I are included.

ACCESSION NUMBER: 2003:633649 CAPLUS DOCUMENT NUMBER: 139:179896

Preparation of biphenyl hydroxamic acids as TITLE:

inhibitors of histone

deacetylase useful against cancer INVENTOR(S): Leahy, Ellen M.; Verner, Erik J.

PATENT ASSIGNEE(S): Axys Pharmaceuticals, USA SOURCE: PCT Int. Appl., 135 pp.

CODEN: PIXXD2 Patent DOCUMENT TYPE:

LANGUAGE: English

FAMILY	ACC.	NUM.	COUNT:
PATENT	INFO	RMATI	: NC

PATENT NO.					KIND DATE			APPLICATION NO.						DATE				
					A2 20030814 A3 20031030			WO 2003-US3846						20030207 <				
	W:	CO, GM, LS,	CR, HR, LT,	CU, HU, LU,	CZ, ID, LV,	DE, IL, MA,	DK, IN, MD,	DM, IS, MG,	DZ, JP, MK,	EC, KE, MN,	BG, EE, KG, MW,	ES, KP, MX,	FI, KR, MZ,	GB, KZ, NO,	GD, LC, NZ,	GE, LK, OM,	GH, LR, PH,	
	R₩:	UA, GH, KG, FI,	UG, GM, KZ, FR,	US, KE, MD, GB,	UZ, LS, RU, GR,	VC, MW, TJ, HU,	VN, MZ, TM, IE,	YU, SD, AT, IT,	ZA, SL, BE, LU,	ZM, SZ, BG, MC,	ZW TZ, CH,	UG, CY, PT,	ZM, CZ, SE,	ZW, DE, SI,	AM, DK, SK,	AZ, EE, TR,	BY, ES,	
AU	BJ, CF, CG, CA 2473505 AU 2003215112 US 20040091951				A1 20030814 A1 20030902					CA 2 AU 2	2003- 2003-	2473 2151	505 12		20030207 <			
JP US	R: 2005	AT, IE, 5170 0058	BE, SI, 07 553	CH, LT,	DE, LV, T A1	DK, FI,	ES, RO, 2005 2006	FR, MK, 0609	GB, CY,	GR, AL, JP 2 US 2 US 2	TR, 2003- 2005- 2002-	LI, BG, 5659 5035 3557	LU, CZ, 54 08	NL, EE,	SE, HU, 2	MC, SK 0030 0051 0020	PT, 207 012 207	
ITI	NG RE	F CO	UNT:		11	WO 2003-US3846 W 2003 MARPAT 139:179896 11 THERE ARE 11 CAPLUS RECORDS THAT CITE TH RECORD (13 CITINGS) 4 THERE ARE 4 CITED REFERENCES AVAILABLE F							THI	S				

REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 21 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

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PRI

The invention relates to triazines (shown as I; variables defined below; e.g. 4-[[4-amino-6-(2-indanylamino)-[1,3,5]triazin-2-ylamino]methyl]-N-(2aminophenyl)benzamide) and Cy3-X1-Ar2-(C(R5):C(R6))qC(O)NH-Ay2 (II; variables defined below; e.g.), many of which are N-(o-aminophenyl)carboxamides, as inhibitors of histone deacetylase (data included for many I and II). The invention provides compds. and methods for inhibiting histone deacetylase enzymic activity. The invention also provides compns. and methods for treating cell proliferative diseases and conditions. Antineoplastic effects of some I and II are illustrated for colorectal, pulmonary and pancreatic neoplasms; also the combined antineoplastic effect of histone deacetylase inhibitors and histone deacetylase antisense oligonucleotides on tumor cells in vivo was demonstrated. For I: R3 and R4 = H, L1, Cy1 and -L1-Cy1 (L1 = C1-C6 alkyl, C2-C6 heteroalkyl, or C3-C6 alkenyl; Cy1 = cycloalkyl, aryl, heteroaryl, or heterocyclyl) or R3 and R4 are taken together with the adjacent N atom to form a 5-, 6-, or 7-membered ring, wherein the ring atoms = C, O, S, and N, and wherein the ring is optionally substituted, and optionally forms part of a bicyclic ring system, or is optionally fused to one or two aryl or heteroaryl rings, or to one or two saturated or partially unsatd. cycloalkyl or heterocyclic rings, each of which rings and ring systems is optionally substituted. Y1 = -N(R1)(R2), -CH2-C(0)-N(R1)(R2), halogen, and H (R1 and R2 = H, L1, Cv1, and -L1-Cv1). Y2 = chemical bond or N(R0) (R0 = H, alkyl, aryl, aralkyl, and acyl); Ak1 = C1-C6 alkylene, C1-C6-heteroalkylene (preferably, in which one -CH2- is replaced with -NH-, and more preferably -NH-CH2), C2-C6 alkenylene or C2-C6 alkynylene; Arl = arylene or heteroarylene, either of which is optionally substituted; and Z1 = C(O)NH-Ay1 and CH:CHC(O)NH-Ay1 (Ay1 = aryl or heteroaryl, each of which is optionally substituted). For II: Cy2 = cycloalkyl, aryl, heteroaryl, or heterocyclyl; X1 = covalent bond, M1-L2-M1, and L2-M2-L2 (L2 = chemical bond, C1-C4 alkylene, C2-C4 alkenylene, and C2-C4 alkynylene, provided that L2 is not a chemical bond when X1 is M1-L2-M1; M1 = -O-, -N(R7)-, -S-, -S(O)-, S(O)2-, -S(O)2N(R7)-, -N(R7)S(O)2-, -C(O)-, -C(O)NH-, -NHC(O)-, -NHC(O)-O- and -OC(O)NH- (R7 = H, alkyl, aryl, aralkyl, acyl, heterocyclyl, and heteroaryl); and M2 = M1, heteroarylene, and heterocyclylene, either of which rings is optionally substituted). Ar2 = arvlene or heteroarvlene, each of which is optionally substituted; R5 and R6 = H, alkyl, aryl, and aralkyl; q is 0 or 1; and Ay2 is a 5-6 membered cycloalkyl, heterocyclyl, or heteroaryl substituted with an amino or hydroxy moiety (preferably these groups are ortho to the amide $\mathbb N$ to which $\mathbb Ay2$ is attached) and further optionally substituted; provided that when Cy2 is naphthyl, X1 is -CH2-, Ar2 is Ph, R5 and R6 are H, and q is 0 or 1, Ay2 is not Ph or o-hydroxyphenyl. Although the methods of preparation are not claimed, hundreds of example prepns. are included.

ACCESSION NUMBER: DOCUMENT NUMBER:

138:271705

2003:242160 CAPLUS

TITLE:

Preparation of triazinyl and other carboxamides as inhibitors of histone deacetylase

INVENTOR(S):

Delorme, Daniel; Woo, Soon Hyung; Vaisburg, Arkadii; Moradel, Oscar; Leit, Silvana; Raeppel, Stephane; Frechette, Sylvie; Bouchain, Giliane

SOURCE:

PATENT ASSIGNEE(S): Methylgene, Inc., Can. PCT Int. Appl., 347 pp. CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 3 PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE PATENT NO. ----WO 2003024448 A2 20030327 WO 2002-US29017 20020912 <--- WO 2003024448 A3 20031113 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20020912 <--20020912 <--IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK BR 2002012510 A 20040824 BR 2002-12510 20020912 <-CN 1578663 A 20050209 CN 2002-822690 20020912
JP 2005508905 T 20050407 JP 2003-528544 20020912
JP 3795044 B2 20060712 CN 15/8663 A 20050209 CN 2002-022050
T) 2005508905 T 20050407 JP 2003-528544
JP 3795044 B2 20060712
IN 2004RN00257 A 20061110 IN 2004-RN257
MX 2004002397 A 20041202 MX 2004-2357
JP 2005255683 A 20050922 JP 2005-80310
AU 2006252047 A1 20070111 AU 2006-252047
AU 2006252047 A1 20070111 20040225 20040312 <--20050318 20061214 US 2001-322402P P 20010914 US 2002-391728P P 20020626 AU 2002-327627 A3 20020912 UP 2003-528544 A3 20020912 WO 2002-US29017 W 20020912 PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 138:271705
OS.CITING REF COUNT: 19 THERE ARE 19 CAPLUS RECORDS THAT CITE THIS

RECORD (20 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 22 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN GI

$$A$$
 N
 X —CONHOH

AB The title compds. [I; A ring = (un)substituted Ph, indolyl; Rl, R2 = H, alkyl, CF3, aryl; X = C5-7 alkylene wherein one CH2 group may be replaced by O or S atom, or wherein 2 carbon atoms from C:C bond, and which is (un)substituted by 1-2 substituents selected form alkyl, halol with histone deacetylase (HDAC) inhibitor activity and anti-cell proliferation activity, were prepared Thus, amidation of e-bromooctanoic acid with O-benzylhydroxylamine.HCl (78% yield) followed N-alkylation of 1,2,3,4-tetrahydroisoquinoline with the resulting bromide (84%), and deprotection by hydrogenation (98%) afforded II which showed 54% HDAC inhibition at 10 nM.

ACCESSION NUMBER: 2002:504787 CAPLUS

DOCUMENT NUMBER: 137:78864

TITLE: Preparation of fused tetrahydropyridines as

cell proliferation inhibitors

INVENTOR(S): Georges, Guy; Grossmann, Adelbert; Mundigl, Olaf; Von

der Saal, Wolfgang; Sattelkau, Tim
PATENT ASSIGNEE(S): F. Hoffmann-La Roche A.-G., Switz.

SOURCE: PCT Int. Appl., 33 pp.

SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.					KIND DATE			APPLICATION NO.										
					A1	_	2002	0704	WO 2001-EP15390									-
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
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		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,	
		UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	zw								
	RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	CH,	
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
CA	2431	471			A1		2002	0704	CA 2001-2431471						20011221 <			-
ΑU	2002	2263	97		A1		2002	0708	AU 2002-226397						20011221 <			-
AU	2002	2263	97		B2		2006	1005										
EP	1353	921			A1		2003	1022		EP 2	001-	9957:	21		20	0011	221 <-	
EP	1353	921			B1		2006	0419										
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		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR							
BR 2001016402					A		2003	1111	BR 2001-16402					20011221 <				

JP	2004516325	T	20040603	JP	2002-552937		20011221	<
HU	2004000554	A2	20040628	HU	2004-554		20011221	<
NZ	526189	A	20041029	NZ	2001-526189		20011221	<
CN	1213046	C	20050803	CN	2001-821205		20011221	
RU	2276140	C2	20060510	RU	2003-122190		20011221	
AT	323700	T	20060515	AT	2001-995721		20011221	
ES	2261519	T3	20061116	ES	2001-995721		20011221	
ZA	2003004264	A	20040830	ZA	2003-4264		20030530	<
KR	836545	B1	20080610	KR	2003-708028		20030616	
NO	2003002830	A	20030804	NO	2003-2830		20030620	<
MX	2003005713	A	20031006	MX	2003-5713		20030620	<
IN	2003CN00985	A	20050422	IN	2003-CN985		20030620	
US	20040053960	A1	20040318	US	2003-451757		20030623	<
US	6800638	B2	20041005					
BG	107935	A	20040831	BG	2003-107935		20030623	<
PRIORITY	APPLN. INFO.:			EP	2000-128487	Α	20001223	
				WO	2001-EP15390	W	20011221	

OTHER SOURCE(S): OS.CITING REF COUNT: MARPAT 137:78864
6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 23 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

Compds. having the formula (R4-L2)nL1-CR1R2R3 or therapeutically acceptable salts thereof [wherein n = 1, 2; L1 = alkenylene, alkylene, alkynylene, cycloalkylene, heteroalkylene, (alkylene) -C(0)N(R5) -(alkylene), (alkylene) -O-(alkylene) (wherein each group is drawn with its left-hand end being the end which attaches to L2, and its right-hand end being the end which attaches to the carbon substituted with R1, R2, and R3); L2 =, C2 alkenylene, O, S, SO2, OC(0)NR5, N(R6)C(0), C(0)N(R6), SO2N(R6), N(R6)SO2, C:N-O, N(R6)C(0)N(R6), and C(0)N(R6)N(R6)C(0) (wherein each group is drawn with its left-hand end being the end which attaches to R4, and its right-hand end being the end which attaches to L1); R1 is selected from the group consisting of alkanoyl, alkoxycarbonyl, CONH2, CO2H, haloalkyl, heterocyclyl (wherein the heterocycle is selected from the group consisting of oxazolyl, dihydrooxazolyl, oxadiazolyl, and tetrazolyl); R2 = R3 = H0; or R2 and R3 together are oxo; R4 = alkoxyalkyl, alkyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, heterocycle, heterocyclylalkyl; R5, R6 = H, alkyl, aryl, arvlalkyl; or R5 and R6, together with the nitrogen atom to which they are attached, form a heterocycle selected from the group consisting of (un) substituted morpholinyl, piperazinyl, piperidinyl, and thiomorpholinyl], which are histone deacetylase (HDAC) inhibitors (no data), are prepared These compds. are used for the treatment of diseases, possibly e.g. several human cancers associated with malfunction in histone deacetylases. Thus, a mixture of 9,9,9-trifluoro-8-oxononanoic acid (50 mg, 0.22 mmol), HOBt (30 mg, 0.22 mmol), carbodiimide PS resin (720 mg), and 4-phenyl-1,3-thiazol-2-amine (0.27 mmol) in DMF (5 mL) at room temperature was agitated in a Quest 210 parallel synthesizer for 18 h, treated with trisamine PS resin (220 mg),

dichloromethane, and the combined solns. were concentrated, followed by purification using preparative HPLC with a gradient system of 0 to 95 % over 10 min of MeCN (containing 0.1% CP3CO2H) in water to give

and agitated for 2 h. The solution was decanted, the resin was rinsed with

9,9,9-trifluoro-8-oxo-N-(4-phenyl-1,3-thiazol-2-yl)nonanamide.

ACCESSION NUMBER: 2002:449627 CAPLUS

DOCUMENT NUMBER: 137:33319

TITLE: Preparation of N-aryl, N-arylalkyl, and
N-heterocyclylnonanamide and -octanamide derivatives
and related compounds as inhibitors

of histone deacetylase

Curtin, Michael L.; Dai, Yujia; Davidsen, Steven K.; Frey, Robin R.; Guo, Yan; Heyman, Howard R.; Holms,

James H.; Ji, Zhiqin; Michaelides, Michael R.;

Vasudevan, Anil; Wada, Carol K.

PATENT ASSIGNEE(S): Abbott Laboratories, USA SOURCE: PCT Int. Appl., 111 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

INVENTOR(S):

	PA:	TENT :	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D	ATE		
		2002				A2		2002	0613		WO 2	001-	US50:	931		2	0011	026	<
	WO	2002	0461	29		A3		2003	0116										
		W:						AU, DK,											
								IN,											
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	ΝZ,	PH,	PL,	
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			UZ,	VN,	YU,	ZA,	zw												
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			DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	
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	US	2002	0103	192		A1		2002	0801		US 2	001-	8083	89		2	0010	314	<
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PRIO	RIT	Y APP	LN.	INFO	. :						US 2	000-	6973	87		A 2	0001	026	
											US 2	001-	8083	89	- 1	A 2	0010	314	
											WO 2	001-	US50	931	1	W 2	0011	026	

OTHER SOURCE(S): OS.CITING REF COUNT:

MARPAT 137:33319
6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD
(7 CITINGS)

L20 ANSWER 24 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN GI

Ι

AB The title tetralones [I; R1 = H, alkyl, CO2H, CO2alkyl; R2-R5 = H, halo, alkyl, etc.; or R2 and R3 together or R3 and R4 together or R4 and R5 together, resp., can form alkylenedioxy ring or alkylene chain; Y = CH2CH2; X = (un)saturated alkylene which can be (un)branched or interrupted by cycloalkyl ringl having histone deacetylase (HDAC) inhibitory activity which is useful in cancer treatment, were prepared and formulated. E.g., a multi-step synthesis of I (R1 = Me; R2-R5 = H; Y = (CH2)2; X = CH:CH(CH2)3] (starting with 2-methyl-1-tetralone and Me 6-oxohexanoate) which showed HDAC inhibitory effect of 60% at 10 nM vs. suberanilohydroxamic acid (SAHA) demonstrating 42% inhibition at 10 nM, was given.

ACCESSION NUMBER: 2002:409264 CAPLUS

DOCUMENT NUMBER: 136:401544

TITLE: Preparation of (1-oxo-1, 2, 3, 4-

tetrahydronaphthalen-2-y1)alkanoic acid hydroxamides as histone deacetylase

(HDAC) inhibitors

INVENTOR(S): Georges, Guy; Grossmann, Adelbert; Sattelkau, Tim;

Schaefer, Wolfgang; Tibes, Ulrich
PATENT ASSIGNEE(S): Hoffmann-La Roche, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 13 pp. CODEN: USXXCO

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PA:	TENT NO.	KIND		APPLICATION NO.			
US	20020065282 6531472	A1 B2	20020530 20030311	US 2001-6173 CA 2001-2430355 WO 2001-EP14311	20011204 <		
CA	2430355	A1	20020613	CA 2001-2430355	20011206 <		
WO	2002046144	A1	20020613	WO 2001-EP14311	20011206 <		
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				, MN, MW, MX, MZ, NC			
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AU	2002016074	A	20020618	AU 2002-16074	20011206 <		
AU	2002216074	B2	20060105				
EP				EP 2001-999552			
				, GR, IT, LI, LU, NI	SE, MC, PT,		
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BK	2001015988	A	20040113	BR 2001-15988	20011206 <		
JP	40014313488	1	20040527	JP 2002-547883	20011206 <		
UP UP	2004000570	7.2	20000320	UII 2004-570	20011206		
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CM	100340545	C	20071003	BR 2001-15988 JP 2002-547883 HU 2004-579 NZ 2001-526051 RU 2003-119658 CN 2001-819734 ZA 2003-4262	20011200		
7.A	2003004262	A	20040830	ZA 2003-4262	20030530 <		
IN	2003CN00853	A	20050422	IN 2003-CN853	20030602		
MX	2003004947	A	20030910	MX 2003-4947	20030603 <		
NO	2003002531	A	20030604	NO 2003-2531	20030604 <		
BG	107889	A	20040630	NO 2003-2531 BG 2003-107889 HK 2004-103910	20030606 <		
HK	HK 1060875		20080222	HK 2004-103910	20040601		
PRIORIT:	Y APPLN. INFO.:			EP 2000-126820	A 20001207		
				WO 2001-EP14311	W 20011206		

OTHER SOURCE(S): MARPAT 136:401544
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L20 ANSWER 25 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

AB Methods of modulating binding between an α/β protein and a

binding partner are provided, along with methods of identifying modulators and their use. The methods comprise contacting the α/β protein

with an allosteric effector mol. which binds to an allosteric site of the α/β protein and alters the conformation of the α/β protein such that the binding of the α/β protein to a binding partner is modulated. Thus, a primary screen for inhibitors of

the classical pathway complement protein C2 and alternative pathway complement protein factor B involving modifications of standard hemolytic CH50 and AH50 assays in a microtiter plate format was carried out. Lead compds. identified in this screen were submitted to a second screening using purified complement proteins to determine which stage of complement activation the compds. inhibited. Five diaryl sulfides were identified. Numerous other assays, e.g., to identify inhibitors of integrin αΕβy interaction with E cadherin, inhibitors of Racl GDP-GTP exchange, or antagonists of E. coli 6-hydroxymethyl-7,8-dihydropterin pyrophosphokinase, were conducted as

well.

ACCESSION NUMBER: 2002:293978 CAPLUS

DOCUMENT NUMBER: 136:337341

TITLE: Materials and methods to modulate ligand binding/enzymic activity of α/β proteins containing an allosteric regulatory site

Stauton, Donald E. INVENTOR(S): PATENT ASSIGNEE(S): Icos Corporation, USA SOURCE: PCT Int. Appl., 163 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.								APPLICATION NO.									
WO	2002031511			A2				WO 2001-US32047					20011012 <					
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CA	2425	581			A1		2002	0418		CA 2	001-	2425	581		2	0011	012 <	
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US	2003	0088	061		A1		2003	0508		US 2	001-	97693	35		2	0011	012 <	
EP	1325	341			A2		2003	0709		EP 2	001-	98156	50		2	0011	012 <	
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MX	2003	0032	07		A		2004	0326									411 <	
PRIORIT:	IORITY APPLN. INFO.:									WO 2	001-	2397! US32	047	1	W 2	0011	012	
OS.CITII	S.CITING REF COUNT:					T	HERE	ARE	5 C.	APLU	S RE	CORDS	S THE	AT C	ITE '	THIS	RECORD	

(5 CITINGS)

L20 ANSWER 26 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN A symposium report. Cv1-2, WF-3161, and trapoxin A are inhibitors of the root growth of lettuce seedlings, cell growth in mouse P-388 leukemia cells, and mammalian histone deacetylase, resp. Unique amino acids (2S,9S)-2-amino-8-oxo-9,10-epoxydecanoic acid (L-Aoe) and pipecolic acid (Pip) are found within these cyclic tetrapeptide inhibitors : cyclo[L-Aoe-D-Tyr(Me)-L-Ile-L-Pip] (Cyl-2), cyclo(L-Aoe-D-Phe-L-Leu-L-Pip) (WF-3161), and cyclo(L-Aoe-L-Phe-L-Phe-D-Pip) (Trapoxin A). In order to study the effects of Pip on the inhibitory activity of these peptides toward histone deacetylase, the authors replaced it with

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various imino acids, such as 1,2,3,4-tetrahydroisoquinoline
-3-carboxylic acid (Tic), hexamethyleneimine carboxylic acid (6Mic), and
heptamethyleneimine carboxylic acid (7Mic), to obtain
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cvclo[L-Asu(NHOH)-D-Tvr(Me)-L-Ile-Xaal (Xaa = Tic, 6Mic, 7Mic).

ACCESSION NUMBER: 1999:353258 CAPLUS

DOCUMENT NUMBER: 131:130254

TITLE: Synthesis of cyclic tetrapeptides containing

non-natural imino acids

AUTHOR(S): Nishino, Hidekazu; Tomizaki, Kin-Ya; Kato, Tamaki; Nishino, Norikazu; Yoshida, Minoru; Komatsu, Yasuhiko

Department of Applied Chemistry, Faculty of CORPORATE SOURCE:

Engineering, Kyushu Institute of Technology,

Kitakyushu, 804-8550, Japan

SOURCE: Peptide Science (1999), Volume Date 1998,

35th, 189-192

CODEN: PSCIFO; ISSN: 1344-7661 PUBLISHER . Protein Research Foundation

DOCUMENT TYPE: Journal

LANGUAGE: English

REFERENCE COUNT: THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L26 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN
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L27 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to compds. of formulas I and II, to methods and compns. that affect the GTP-binding activity of members of the Rho family GTPases, preferably Rac GTPases (Racl, Raclb, Rac2 and/or Rac3). Compds. of formulas I and II wherein Rl, R4 and Rl2 are independently H, Cl-6 alkyl, C2-6 alkenyl and C2-6 alkynyl; R2-R3 and R9-R1l are independently H, OH and C1-6 alkoxy; R2R3, R9R10 and/or R10R1l may be fused together to form -O(CH2)1-60- linked to the adjacent cycle; A is N, N*, N*-C1-6 alkyl and N*-arylalkyl; B is absent, CH, CH2, C(-Me), CH(-Me), C(-benzyl) and C(-phenyl); D is absent, CH and CH2; F and G are independently CH and CH2; R13-R14, R5 and R16 are independently H, OH and C1-6 alkoxy; R13R14 and/or R16R5 may be fused together to form -O(CH2)1-60- linked to the adjacent cycle; R15 and R6-R8 are independently H, C1-6 alkyl, C2-6

alkylene and C2-6 alkynyl; H is N, N+, N+-C1-6 alkyl and N+-benzyl; and their tautomers, optical and geometrical isomers, racemates, salts, hydrates and mixts. thereof, are claimed. Example compound III was prepared by demethylation of berberine chloride. All the invention compds. were evaluated for their Rac GTPases inhibitory activity. From the assay, it was determined that III exhibited the inhibition of 100 % against all of the Rac1, Rac1b and Cdc42;.

2009:45500 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 150:121499

TITLE: Isoquinoline derivatives as Rac GTPases inhibitors and their preparation, pharmaceutical compositions and use

in the treatment of diseases

INVENTOR(S): Leblond, Bertrand; Beausoleil, Eric ; Chauvignac, Cedric; Taverne, Thierry; Picard,

Virginie; De Oliveira, Catherine; Schweighoffer,

Fabien

PATENT ASSIGNEE(S): Exonhit Therapeutics SA, Fr.

SOURCE: Eur. Pat. Appl., 46pp.

CODEN: EPXXDW DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2 PATENT INFORMATION:

PAT	ENT	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D.	ATE	
EP	2014	651			A1		2009	0114		EP 2	007-	3012	30		2	0070	712
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		AL,	BA,	HR,	MK,	RS											
WO	2009	0074	57		A2		2009	0115		WO 2	008-	EP59	134		2	0080	711
WO	2009	0074	57		A3		2009	0326									
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L27 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN GI

Amides I [R1 = H, alkvl; R2 = H, alkvl; or NR1R2 = (un)saturated (un) substituted 4-7 membered ring; each R3 = independently H, CHO and derivs., SO2H and derivs., COOH and derivs., (un)substituted cyclo/alkyl, hetero/aryl, etc.; R4 = H, alkyl, CO-alkyl; T = (CH2)m; A = (CH2)n; Z = (CH2)q; m, n, q = independently 0-3 with the proviso that the sum of m, n, and q = 2-3; s = 0 or when X = N, then s = 0-1; W, X, Y = independentlyCH, CR5, CR6, N, O, S; R5, R6 = independently H, halo, alkyl, alkoxy, Ph; or R5 and R6 together with the atoms to which they are attached jointly form a carbocyclic or a heterocyclic ring; provided that certain compds. are not included] and II [R9 = NOR11 and R10 does not exist; R9 = OR11 and R10 = alkyl; when there is a double bond between C's 2 ans 3 of the propionic acid moiety, then R9 = H, alkyl; and R10 does not exist], and their pharmaceutically acceptable salts, and their related derivs., having analgesic and/or immunostimulant activity in mammals, were prepared Thus, reacting Me isocyanoacetate with piperazine-1-carboxylic acid tert-Bu ester, followed by cyclization with pyridine-4-carboxaldehyde, and treatment with 37% HCl in MeOH for 3 h at 50° gave threo-III.3HCl. Selected I showed analgesic activity in the rat Chung

model.

ACCESSION NUMBER: 2006:768556 CAPLUS DOCUMENT NUMBER: 145:211031

Preparation of

3-hetero(aryl)-3-hydroxy-2-aminopropionic acid amides and related compounds having analgesic and/or

immunostimulant activity

Leblond, Bertrand; Beausolell, Eric; Taverne, Thierry; Donello, John E.

Allergan, Inc., USA

English

PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 238pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: FAMILY ACC, NUM. COUNT: 4

PATENT INFORMATION:

TITLE:

INVENTOR(S):

PAT	ENT	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D.	ATE		
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WO	2006	0812	73		A1		2006	0803	1	WO 2	006-	JS25	57		2	0060	125	
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     US 20090036436
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PRIORITY APPLN. INFO.:
                                                               W 20060125
                                           WO 2006-US2557
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OTHER SOURCE(S): OS.CITING REF COUNT: CASREACT 145:211031; MARPAT 145:211031

THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)

REFERENCE COUNT:

GI

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN AN 2005:516308 BIBLIOGRAPHIC DATA NOT AVAILABLE

AN 2005:516308 BIBLIOGRAPHIC DATA NOT AVAILABLE BIBLIOGRAPHIC DATA NOT AVAILABLE

L27 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN

Title compds. I [wherein R1 = [(tetrahydropyran-2-y1)oxy]methyl, AB CH2-B, (morpholin-4-yl)methyl, pyrrolidin-1-ylmethyl, etc.; B = halo, OH, OCH2OMe, OCH2OCH2CH2OMe, OSO2-alkyl, OTBDMS; R2 = H, alk(en)yl; X, Y = independently O, S, NH and derivs.; A = quinolin-4-yl, quinolin-8-yl, benzo[b]thiophen-7-yl, quinazolin-4-yl; Z = (CH2)n, optionally interrupted by a heteroatom, C(:0) or aryldialkyl, especially xylenyl, group; n = 1-10; their tautomers, optical and geometrical isomers, racemates, salts, hydrates and mixts.] were prepared as antiproliferative agents and angiogenesis inhibitors. Nine biol. assays are given. For example, II was prepared, in 2 steps, from pyranone III, 1,4-dibromobutane, and 7-(trifluoromethyl)-4-quinolinethiol. In an in vitro cell viability assay, selected I showed an IC50 < 4 µM and < 9 µM against HCT116 and MDA-MB-231 tumoral cell lines, demonstrating their cytostatic mode of action. I are useful for treating various diseases associated with abnormal cell proliferation, including cancer, especially leukemia, or associated with unregulated angiogenesis including growth and metastasis of solid tumors, ocular diseases, especially retinopathies, or arthritis.

ACCESSION NUMBER: 2004:740320 CAPLUS

DOCUMENT NUMBER: 141:260557

TITLE:

Preparation of novel antiproliferative and

antiangiogenic agents, in particular quinoline-derivatized pyranones, for treating cell

proliferative diseases, retinopathies and arthritis

Leblond, Bertrand; Petit, Silvere; Picard, Virginie; Taverne, Thierry; Schweighoffer, Fabien

PATENT ASSIGNEE(S): Exonhit Therapeutics Sa, Fr.

SOURCE: PCT Int. Appl., 156 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004076445	A2	20040910	WO 2004-IB926	20040227
WO 2004076445	A3	20050106		

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             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
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     EP 1597253
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PRIORITY APPLN. INFO.:
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                                                                 A 20030228
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                         MARPAT 141:260557
OTHER SOURCE(S):
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(7 CITINGS)

THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN GI

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OS.CITING REF COUNT:

REFERENCE COUNT:

Me Me

AB Title compds. I [R1 = H, alkyl, CH2OH, OH, CHO, COOH, etc.; R2 = H, halo, COOH, perfluoroalkyl, etc.; R3 = H, alkyl, halo, fluoroalkyl, etc.; X1 =

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C, O, S; R5, R6 = Me, Et when X1 is C; R5, R6 = nothing when X1 = S or O;
     R5, R6 = 1 or 2 atoms of O when X1 = S (as in the case of a SO or SO2
     group); R4 = H, halo, aryl, aralkyl, etc.; X2, X3 = C, N, or X2-X3 = S, O,
     N: thus the ring containing X2 and X3 may be benzene, pyridine, thiophene,
     furan, pyrrole; R7 = H, trifluoromethyl, (un)substituted alkyl; X4 = C, N;
     X5 = C, O, S, N, etc.; n = 0, 1] are prepared Thus, the title compound II was
     prepared in 6 steps from Me bromoacetate via reaction with 3-bromophenol,
     hydrolysis, cyclization, Wittig reaction with (5,6,7,8-tetrahydro
     -5,5,8,8-tetramethyl-2-naphthenyl)methyltriphenylphosphonium bromide,
     cvanation, and hydrolysis of the nitrile. A study on the selectivity of
     transactivation among the retinoic acid receptors showed that this at 1
     \mu M effected a transactivation mediated by RAR\beta >9 times that
     mediated by RARa. I are useful as components for dermatol.,
     pharmaceutical, or cosmetic compns.
ACCESSION NUMBER: 1998:619010 CAPLUS
DOCUMENT NUMBER:
                        129:189505
ORIGINAL REFERENCE NO.: 129:38501a,38504a
TITLE:
                        Preparation of retinoid-type aromatic tetracyclic
                        compounds for pharmaceutical and cosmetic compositions
INVENTOR(S):
                        Leblond, Bertrand; Devine, Abdallah;
                        Schoofs, Alain Rene; Germain, Pierre; Pourrias,
                        Bernard
PATENT ASSIGNEE(S):
                        Centre Europeen de Bioprospective, Fr.
SOURCE:
                        Fr. Demande, 90 pp.
                        CODEN: FRXXBL
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
     PATENT NO.
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                       A1 19980717 FR 1997-421
B1 19990409
     FR 2758325
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     FR 2758325
                        A1 19980723 CA 1997-2277042
     CA 2277042
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     WO 9831654
                        A1 19980723 WO 1997-FR2223
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JP 2002511053 T 20020409 JP 1998-512026
US 6239284 B1 20010529 US 1999-353926
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WO 1997-FR2223 W 19971205
PRIORITY APPLN. INFO.:
OTHER SOURCE(S): MARPAT 129:189505
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
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REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE TOTAL ENTRY SESSION
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